


Environmental



Guidance

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# RCRA Permitting Guide for Hazardous & Radioactive Mixed Waste Management Facilities

April 1997

U.S. Department of Energy  
Office of Environmental Policy & Assistance  
RCRA/CERCLA Division, EH-413  
Washington, D.C.

# **RCRA Permitting Guide for DOE Hazardous and Radioactive Mixed Waste Facilities**

**April 1997**



**Prepared by**

**U.S. Department of Energy  
Office of Environmental Policy and Assistance  
RCRA/CERCLA Division  
(EH-413)  
Washington, D.C.**

**Technical Support by**

**Halliburton NUS Corporation  
and  
Argonne National Laboratory**

## **Note to the Reader**

This guidance is based primarily on the Federal regulations concerning permitting under the Resource Conservation and Recovery Act (RCRA located in Title 40 of the Code of Federal Regulations (40 CFR), parts 124, 264, 266, 268 and 270. As indicated throughout the document, some information has also been extracted from other sources. These sources include U.S. Environmental Protection Agency (EPA) guidance documents, Office of Solid Waste and Emergency Response (OSWER) Directives, *Federal Register* notices, and memoranda. These sources are referenced or identified as supplemental information at the end of each chapter. Many are available from the U.S. Department of Commerce, National Technical Information Service (NTIS). NTIS ordering information is as follows:

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Carolyn Osborne	Waste Activities Division (EH-421) Office of NEPA Policy & Assistance
Hancy Hunt	Office of Solid Waste Federal, State, and Tribal Programs U. S. Environmental Protection Agency
James Michael	Office of Solid Waste State Programs and Permits Branch U. S. Environmental Protection Agency
Wayne Roepe	Office of Solid Waste State Programs and Permits Branch U. S. Environmental Protection Agency

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## **List of Abbreviations and Acronyms**

AEA	Atomic Energy Act of 1954, P.L. 83-703, as amended
ALARA	as low as reasonably achievable
ARARs	applicable or relevant and appropriate requirements
BIFs	boilers and industrial furnaces
BTU	British thermal unit(s)
CAA	Clean Air Act, P.L. 90-148, as amended
CAMU	corrective action management unit
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act, P.L. 96-510, as amended
CESQG	conditionally exempt small quantity generator
CFR	Code of Federal Regulations
CWA	Clean Water Act, as amended by the Federal Water Pollution Control Act Amendments of 1972, P.L. 92-500
DOE	U.S. Department of Energy
DOI	U.S. Department of the Interior
E.O.	Executive Order
EA	Environmental Assessment
EIS	Environmental Impact Statement
EM	U.S. Department of Energy, Office of Environmental Management
EMP	Environmental Monitoring Plan
EMS	Emergency Management System
EPA	U.S. Environmental Protection Agency
ERPP	Environmental Radiological Protection Program
ES&H	Environment, Safety and Health
FEMA	Federal Emergency Management Agency
FONSI	Finding of No Significant Impact
FOTWs	federally owned treatment works
FR	Federal Register
HAP	hazardous air pollutant
HSWA	Hazardous and Solid Waste Amendments, P.L. 98-616
HWM	hazardous waste management
ID	identification
LDR	Land Disposal Restrictions

LOIS	loss of interim status
M&O	maintenance and operating
MOA	Memorandum of Agreement
NARM	naturally occurring and accelerator-produced radioactive material
NCP	National Contingency Plan
NEPA	National Environmental Policy Act, P.L. 91-190, as amended
NESHAPs	National Emission Standards for Hazardous Air Pollutants
NMFS	National Marine Fisheries Service
NOD	Notice of Deficiency
NORM	naturally occurring radioactive material
NPS	National Park Service
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NRC	U.S. Nuclear Regulatory Commission
OB/OD	open burning/open detonation
OMB	Office of Management and Budget
P.L.	Public Law
PCBs	polychlorinated biphenyls
POHCs	principal organic hazardous constituents
POTW	publicly owned treatment works
PSD	Prevention of Significant Deterioration
QA	quality assurance
RCRA	Resource Conservation and Recovery Act, P.L. 94-580, as amended
RD&D	research, development and demonstration
RI/FS	remedial investigation/feasibility study
RMW	radioactive mixed waste
ROD	Record of Decision
SAR	Safety Analysis Report
SARA	Superfund Amendments and Reauthorization Act
SDWA	Safe Drinking Water Act
SEN	Secretary of Energy Notice
SHPO	State Historic Preservation Officer
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SOPs	standard operating procedures
SPCC	spill prevention control and countermeasures

SSAB	site-specific advisory board
SWMU	solid waste management unit
TSCA	Toxic Substances Control Act, P.L. 94-469, as amended
TSD	treatment, storage, or disposal
TSDF	treatment, storage, or disposal facility
U.S.C.	United States Code
UEC	Uranium Enrichment Corporation
UIC	underground injection control
USFWS	U.S. Fish and Wildlife Service

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# INTRODUCTION

## Purpose

The purpose of this guidance document is to assist the U.S. Department of Energy (DOE) and contractor personnel in identifying waste management units that are required by the Resource Conservation and Recovery Act (RCRA) to obtain hazardous waste treatment, storage, or disposal permits. Further, this guidance is intended to provide information on and instructions for preparing RCRA permit applications, negotiating RCRA permits with regulatory agencies, modifying RCRA permits, and complying with RCRA permit terms and conditions. As such, the guidance depends heavily on regulations promulgated by the U.S. Environmental Protection Agency (EPA). Because EPA's regulations are frequently modified and supplemented, this guidance is not intended as a substitute for those regulations. Rather, it should be used as a resource for locating and interpreting applicable Federal regulations. DOE personnel responsible for RCRA permitting in States that have been authorized to implement the RCRA hazardous waste permitting program may use this guidance as a source of RCRA program information, but will need to consult applicable State regulations before preparing RCRA permit applications. The guidance focuses on waste management unit types used by DOE to manage hazardous and radioactive mixed waste (RMW).

## Background

This section of the Introduction describes the regulatory framework in which permits are issued under RCRA and the scope of this guidance document in relation to this regulatory framework. It also provides a brief explanation of some of the factors that are expected to influence RCRA permitting activity throughout the DOE complex over the next several years.

## Radioactive Mixed Wastes



Radioactive mixed wastes (RMW) are wastes that contain both a hazardous waste component regulated under Subtitle C of RCRA and a radioactive component consisting of source, special nuclear, or byproduct material regulated under the Atomic Energy Act (AEA) [RCRA §1004(41)]. EPA clarified on July 3, 1986 (51 FR 24504), that RCRA applies to wastes that contain both types of components and required States to petition for authorization to regulate RMW. Nevertheless, some confusion still existed as to the scope of wastes that constituted mixed wastes, and the July 3, 1986, notice stated that pending an interpretation of the “byproduct definition” by DOE, RMW would be regulated on a case-by-case basis. On May 1, 1987, DOE published the “Byproduct Material” rule, which clarified that for the purpose of determining the

applicability of RCRA to DOE radioactive waste, only the actual radionuclides suspended in the waste substance would fall within the definition of “byproduct material” as stated in the AEA §11(e)(1). Therefore, only the actual radionuclides in the waste substance are exempt from RCRA pursuant to RCRA §1004(41). The nonradioactive hazardous component of the waste substance is not exempt from regulation under RCRA (10 CFR 962.3).

The promulgated language of the “Byproduct Material” rule interprets only RCRA’s exemption of byproduct material from regulation as solid waste. It does not address RCRA’s similar exemptions of source material and special nuclear material. Notwithstanding, DOE’s preamble to the “Byproduct Material” rule implies that if mixed wastes contain radionuclides meeting the definition of source material or special nuclear material, again, only the radionuclides should be exempt from RCRA regulation [52 FR 15937 (May 1, 1987)]. Based on this interpretation, all RCRA implementing regulations applicable to hazardous wastes should be applied equally to RMW generated by DOE. Nevertheless, because of the nature of RMW, some special concerns should be addressed during permitting of treatment, storage, and disposal facilities that will manage RMW. Hence, throughout this guidance document, discussions important to RMW are marked with the symbol of the atom [☢].

Some DOE facilities seeking RCRA treatment, storage, or disposal (TSD) permits may manage hazardous wastes that are radioactive, but that do not contain radionuclides defined by the AEA as source material, special nuclear material, or byproduct material. Instead, the radionuclides may be naturally occurring radioactive materials (NORM) or naturally occurring and accelerator-produced radioactive materials (NARM). Such radioactive hazardous wastes do not fall within the definition of RMW. Also, RCRA §1004(41) does not exempt the radionuclides contained in them from RCRA regulation. Nevertheless, many of the same special concerns apply to both RMW and NORM/NARM-containing hazardous wastes. Therefore, DOE personnel responsible for RCRA permitting should consider discussions marked with the atom symbol in this guidance document to apply equally to RMW and hazardous wastes containing NORM/NARM.

## **Regulatory Framework**

Unless excluded by the implementing regulations, owners/operators of facilities that treat, store, or dispose of hazardous or RMW regulated under RCRA Subtitle C, “Hazardous Waste Management,” must have permits. Facilities in existence on the effective date of statutory or regulatory changes subjecting them to RCRA permitting requirements may operate under “interim status” until permits are issued or denied. New facilities (or new units at existing facilities) that manage hazardous or RMW, however, must apply for and obtain RCRA permits before construction begins [40 CFR 270.10(f)(1)].

The regulatory agency responsible for issuing a RCRA permit to any particular hazardous or RMW treatment, storage, or disposal facility will depend on the geographic location of the facility. In accordance with the original RCRA legislation, the EPA has authorized many States to implement the base RCRA Subtitle C program within their boundaries entirely in lieu of the Federal program. In these authorized States, the State issues base RCRA permits. However, States with base RCRA authorization often have not yet been authorized to implement RCRA programs created by the Hazardous and Solid Waste Amendments of 1984 (HSWA) (e.g., corrective action, land disposal restrictions). Therefore, even in authorized States, the appropriate EPA Regional Office may issue portions of RCRA permits covering HSWA programs for which the State is not authorized. In these circumstances, permit applications are usually filed with the responsible State agency, which then coordinates the overall permitting process in accordance with a State/EPA Memorandum of Agreement (MOA). In States having no RCRA authorizations, permit applications must be filed with the responsible EPA Regional Office, which issues the entire RCRA permit.

The EPA hazardous waste management regulations set baseline standards that authorized State programs must at least match. Authorized States may also (and often do) adopt more stringent regulations (i.e., regulations that place stricter requirements on the regulated community), or regulations broader in scope (i.e., regulations that increase the size of the regulated community) than the Federal program. In any event, an authorized State has primary enforcement responsibility within its boundaries for its entire program. With one exception, EPA can also enforce RCRA requirements in an authorized State. The exception is that when a State program is broader in scope than the Federal baseline program, EPA cannot enforce the additional coverage because it is not part of the Federal program [40 CFR 271.19(e)].

Hazardous wastes subject to RCRA jurisdiction are defined in 40 CFR part 261, "Identification and Listing of Hazardous Waste." Standards applicable to generators of these wastes are specified in 40 CFR part 262. Standards applicable to owners/operators of facilities that manage these wastes are listed in 40 CFR part 265 for interim status facilities that have not yet received RCRA permits and in 40 CFR part 264 for permitted facilities. These regulations contain general facility standards applicable to all facilities that manage hazardous and RMW, and unit-specific standards applicable to specific types of treatment, storage, or disposal (TSD) units.

The 40 CFR part 264 regulations, "Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities," serve as the primary basis for RCRA permit provisions. For interim status facilities, compliance data developed in the course of operating under the 40 CFR part 265 requirements, "Interim Status Standards for the Owners of Hazardous Waste Treatment, Storage, and Disposal Facilities," are also used in the development of the facility's permit. It is through the

permit application and negotiation process that appropriate 40 CFR part 264 regulatory requirements are applied to individual facilities.

In 1984, HSWA modified RCRA to mandate that provisions be incorporated into RCRA permits to institute corrective action for releases of hazardous wastes or hazardous constituents from solid waste management units (SWMUs). EPA codified this requirement in 40 CFR 264.101, Corrective Action for Solid Waste Management Units. Additionally, EPA announced plans to enact a comprehensive corrective action regulatory program in 40 CFR part 264, subpart S [55 FR 30798 (July 27, 1990) and 61 FR 19432 (May 1, 1996)]. Thus far, however, only regulations providing for corrective action management units (CAMUs) (40 CFR 264.552) and temporary units (40 CFR 264.553) have been promulgated in subpart S. EPA's Semiannual Regulatory Agenda issued in November 1996 indicates that finalization of all subpart S regulations is scheduled to occur by December 1998 [61 FR 62153 (November 29, 1996)].

HSWA also prohibits disposal of RCRA hazardous wastes in or on the land, unless the wastes are first treated to meet standards that EPA was required to promulgate. These treatment standards, called Land Disposal Restrictions (LDRs), are given in 40 CFR part 268, "Land Disposal Restrictions," and affect RCRA permit provisions governing waste treatment, storage and disposal practices.

Regulations dictating specific information that must be submitted to EPA or an authorized State in RCRA permit applications are located in 40 CFR part 270, "EPA Administered Permit Programs: The Hazardous Waste Permit Program." These regulations also address the qualification requirements for obtaining interim status, the circumstances that terminate interim status, permit conditions, permit modifications, permit duration, and special forms of permits. Special forms of permits include permits by rule; emergency permits; trial burn permits for incinerators and boilers and industrial furnaces; permits for land treatment demonstrations using field test or laboratory analyses; interim permits for underground injection control wells; and research, development and demonstration permits.

The Federal administrative process by which permits are issued, modified, and revoked and reissued is governed by regulations in 40 CFR part 124 "Procedures for Decisionmaking." For RCRA permits, the process involves the following:

- Convening of at least one meeting with the public by the applicant before submitting a permit application (40 CFR 124.31);
- Issuance of public notice by the responsible regulatory agency when an application has been filed for an initial permit or renewal of an existing permit (40 CFR 124.32);

- Assessment by the responsible regulatory agency of the need for an information repository (40 CFR 124.33);
- Review of the permit application by the responsible regulatory agency (40 CFR 124.3);
- Preparation of the draft permit by the responsible regulatory agency [40 CFR 124.6(a)];
- Issuance of public notice by the responsible regulatory agency of opportunity for comment and public hearing on the draft permit (40 CFR 124.10);
- Convening of a public hearing by the responsible regulatory agency, if warranted (40 CFR 124.12); and
- Finalization of the permit by the responsible regulatory agency (40 CFR 124.17).

Other Federal laws that may affect the RCRA permitting process include the following:

- Wild and Scenic Rivers Act,
- National Historic Preservation Act of 1966,
- Endangered Species Act,
- Coastal Zone Management Act,
- Fish and Wildlife Coordination Act,
- Archeological and Historic Preservation Act,
- Clean Air Act,
- Clean Water Act,
- Toxic Substances Control Act,
- Atomic Energy Act, and
- Comprehensive Environmental Response, Compensation, and Liability Act.

For DOE facilities, the RCRA permitting process may also be affected by the National Environmental Policy Act, Executive Orders, and DOE Orders.

## **Scope of This Guidance Document**

This guidance document provides an overview of the Federal RCRA permitting program. Consequently, it will almost always be necessary for users of this document to supplement the baseline information presented here with information relevant to regulatory requirements in the State in which the facility being permitted is located. In addition, EPA has published a number of guidance documents applicable to RCRA permitting. The “References” section at the end of each chapter in this report contains citations to these and other documents that could provide useful information relevant to the RCRA permitting process.

This document focuses on information that is applicable to DOE. For example, there are specific RCRA permit application requirements for containers, tank systems, surface impoundments, waste piles, incinerators, land treatment facilities, landfills, boilers and industrial furnaces, miscellaneous units, process vents, equipment, drip pads, and containment buildings. However, this document does not address those requirements applicable to units that are not used by DOE to manage hazardous or RMW. Thus, this document does not address specific requirements applicable to waste piles, land treatment facilities, or drip pads.

The RCRA regulations exempt certain types of TSD units or facilities that could be used by DOE for managing RMW and hazardous wastes from the requirement to obtain a RCRA permit. This guidance document identifies such exempt units and facilities, but does not provide additional information about them, or address other RCRA regulatory requirements that may apply to them. For information about such requirements when storage of RMW is involved, DOE personnel responsible for RCRA permitting should consult the “Joint NRC/EPA Guidance on the Storage of Mixed Low-Level Radioactive and Hazardous Waste, Draft for Comment,” [60 FR 40204 (August 7, 1995)]. Additionally, DOE personnel should be aware that, in spite of the exemption, LDR treatment standards promulgated by EPA pursuant to HSWA (40 CFR part 268) may apply to the contents of RMW and hazardous waste TSD units that are exempt from RCRA permitting requirements. Exempt TSD units and facilities are briefly described below. Each description contains a regulatory citation for the exemption.

- Storage units where generators accumulate waste on-site for less than 90 days are not required to have RCRA permits as long as the units are in compliance with the applicable requirements of 40 CFR 262.34 [40 CFR 270.1(c)(2)(i)].
- Storage units in which a generator of greater than 100 kilograms but less than 1,000 kilograms of hazardous waste in a calendar month accumulates such

waste on-site for 180 days or less (270 days or less if off-site transport for treatment and disposal must exceed 200 miles) are not required to have RCRA permits provided that: the quantity of accumulated waste never exceeds 6,000 kilograms; the accumulation units comply with applicable interim status standards for containers or tanks in 40 CFR part 265, subparts I and J, respectively; the date accumulation began and the words “hazardous waste” are marked on the accumulation tank or container; the generator complies with interim status standards in 40 CFR part 265 for preparedness; the generator complies with the requirement for a waste analysis plan in 40 CFR 268.7(a)(4); and the generator meets all other requirements listed in 40 CFR 262.34(d)(5) [40 CFR 262.34(d) and (e)].

- Containers at or near the point of generation in which generators accumulate less than 55 gallons of hazardous waste, or less than one quart of acutely hazardous waste, are not required to have RCRA permits as long as: the containers are under the control of the operator of the waste-generating process; the containers are in compliance with certain requirements for interim status container use; and the generator is in compliance with 40 CFR 262.34(c)(1)(ii) and 262.34(c)(2) [40 CFR 262.34(c)].
- Facilities operated solely for the purpose of treating, storing, or disposing of hazardous waste that is excluded from regulation under 40 CFR 261.4 do not need a RCRA permit [40 CFR 270.1(c)(2)(iii)]. Wastes excluded from regulation by 40 CFR 261.4 include:
  - Certain materials that are excluded from the definition of solid waste [40 CFR 261.4(a)];
  - Certain solid wastes that are excluded from the definition of hazardous waste [40 CFR 261.4(b)];
  - Hazardous wastes generated in certain tanks, vessels, pipelines, and manufacturing units, until the wastes exit the unit in which they are generated, provided that the waste exits the unit within 90 days after the unit ceases operation, and provided that the unit is not a surface impoundment [40 CFR 261.4(c)];
  - Solid waste and media samples collected for the purpose of testing [40 CFR 261.4(d)];
  - Certain hazardous waste samples generated and collected for the purpose of conducting treatability studies [40 CFR 261.4(e)]; and
  - Certain hazardous waste samples undergoing treatability studies [40 CFR 261.4(f)].
- Facilities permitted, licensed, or registered by a State to manage municipal solid waste or non-municipal non-hazardous solid waste do not need RCRA permits

to manage hazardous or RMW if the only hazardous or RMW that the facility treats, stores, or disposes of originates from conditionally exempt small quantity generators (CESQGs) as defined in 40 CFR 261.5, and the facility complies with all applicable conditions on exemption [40 CFR 270.1(c)(2)(iii)].

- Totally enclosed treatment facilities as defined by 40 CFR 260.10 are not required to obtain RCRA permits [40 CFR 270.1(c)(2)(iv)]. Such facilities include facilities for the treatment of hazardous waste or RMW that are directly connected to industrial production processes and that are constructed and operated in a manner that prevents the release of any hazardous waste, or any constituent thereof, into the environment during treatment (40 CFR 260.10).
- Wastewater treatment units meeting the definition of a wastewater treatment unit in 40 CFR 260.10 are exempt from RCRA permit requirements [40 CFR 270.1(c)(2)(v)].
- Elementary neutralization units (devices used for neutralizing wastes that are hazardous only because they exhibit the characteristic of corrosivity, or because they were listed for exhibiting the characteristic of corrosivity) are exempt from RCRA permit requirements [40 CFR 270.1(c)(2)(v)].
- Transfer facilities where transporters store manifested shipments of hazardous waste or RMW in containers meeting the requirements of 40 CFR 264.30 at a transfer facility for a period of ten days or less are exempt from RCRA permit requirements [40 CFR 270.1(c)(2)(vi)].
- Operations that involve adding absorbent material to waste in a container or adding waste to absorbent material in a container (provided that these actions occur when the waste is first placed in the container) are exempt from RCRA permit requirements, as long as such operations comply with the requirements of 40 CFR 264.17(b), 264.171, and 264.172 [40 CFR 270.1(c)(2)(vii)].
- Universal waste handlers and universal waste transporters who are regulated under 40 CFR part 273, "Standards for Universal Waste Management," and who manage (1) batteries as described in 40 CFR 273.2, (2) pesticides as described in 40 CFR 273.3, and (3) thermostats as described in 40 CFR 273.4 are not required to obtain RCRA permits [40 CFR 270.1(c)(2)(viii)].
- Treatment or containment activities do not require a RCRA permit when taken in immediate response to: a discharge of hazardous waste or RMW, an imminent and substantial threat of a discharge of hazardous or RMW, or discharge of a material which, when discharged, becomes a hazardous or



RMW. Treatment activities that continue after the immediate response is over, however, do require a RCRA permit [40 CFR 270.1(c)(3)].

- Some hazardous waste and RMW recycling processes (e.g., the blending of reclaimed solvents) do not require a RCRA permit. The storage of RCRA hazardous materials before they are recycled, however, does require a RCRA permit [40 CFR 261.6(c)].

## **RCRA Permitting Activity at DOE Facilities**

DOE owns/operates existing permitted and interim status hazardous and RMW management facilities, which already require Department personnel to be involved in certain types of permitting activities. Beyond this, the level of DOE's permitting activity for RMW and hazardous waste management facilities is expected to increase as the Department comes into compliance with LDR treatment standards, the LDR storage prohibition, and HSWA corrective action requirements. Other factors that may influence (either positively or negatively) the future level of RCRA permitting activity within the DOE complex include DOE's waste minimization program, which involves developing strategies to reduce the volume of wastes produced; DOE's Environmental Management Program Ten-Year Plan to complete cleanup at DOE nuclear sites within a decade, which may influence the amount and rate of remediation wastes generated in the future; and DOE's Waste Management Programmatic Environmental Impact Statement, which as drafted [DOE/EIS-0200-D, *Draft Waste Management Programmatic Environmental Impact Statement for Managing Treatment, Storage and Disposal of Radioactive and Hazardous Wastes* (August 1995)], considers various future waste management facility configurations for hazardous and radioactive wastes.

## **Overview of Chapters and Modules**

### **Chapter 1: Interim Status**

Chapter 1 discusses the requirements applicable to hazardous waste and RMW treatment, storage, and disposal facilities (TSDFs) that qualify for interim status. During interim status, a qualifying hazardous waste TSDF is treated as having been issued a RCRA permit, even though a final permit decision has not been made. Congress created interim status in the original RCRA legislation to allow existing hazardous waste TSDFs to continue operating until EPA and authorized States could issue permits.

The modules of Chapter 1 include: Module 1-1, Eligibility for Interim Status; Module 1-2, Part B Permit Application Deadlines and Loss of Interim Status (LOIS); and Module 1-3, Changes During Interim Status. The chapter addresses several

differences in filing deadlines and interim status eligibility for hazardous wastes compared with RMW.

Module 1-1 presents the criteria that TSDFs must meet to qualify for interim status. These criteria include (1) being in existence on the date of statutory or regulatory changes that subject the facility to RCRA permitting requirements; (2) notifying the responsible regulatory agency of hazardous waste activity within a specified time; and (3) submitting a RCRA Part A permit application within a specified time. Facilities that have previously been denied RCRA permits or that have had RCRA permits terminated are not eligible for interim status.

Module 1-2 discusses the conditions under which interim status might be terminated. Such conditions include (1) failure to submit a Part B permit application by the appropriate deadlines; (2) being denied a RCRA permit; (3) making unallowable physical changes to the facility; and (4) failure to obey a compliance order issued under Section 3008(a) of RCRA (40 CFR 270.73). The deadlines by which interim status facilities must file RCRA Part B permit applications are presented in this module.

Module 1-3 explains the requirements for making physical changes to TSDFs during interim status. Certain changes, which the module delineates, can be made by submitting revised Part A permit applications before making changes and, in some cases, also submitting justifications of the need for change (40 CFR 270.72).

## **Chapter 2: RCRA Permit Application**

Chapter 2 consists of five modules covering RCRA permit application deadlines for new facilities, the contents of RCRA permit applications, the waste minimization certifications and exposure assessments that must accompany RCRA permit applications, RCRA permit renewal procedures, and suggestions on submitting RCRA permit applications and renewal requests.

Module 2-1 explains that Parts A and B of the RCRA permit application must be submitted together at least 180 days before the expected date for starting construction of a new TSD facility [40 CFR 270.10(f)].

Module 2-2 covers the required contents of Parts A and B of the RCRA permit application. In this module, detailed exhibits list mandated information with applicable cross-references to the RCRA regulations. Module 2-2-1 also provides information about filling out the RCRA Part A application form that is not covered by the EPA instructions accompanying the form, and that is peculiar to DOE facilities. Module 2-2-2 adds information about evaluating the completeness and technical adequacy of Part B of the RCRA permit application and, in ten sections, describes how to prepare the required information for each aspect of the Part B application. Aspects discussed

include facility description, waste characterization, process information, groundwater monitoring, procedures to prevent hazards, contingency plan, personnel training, closure and post-closure plans, corrective action for solid waste management units, and Part B certification.

Module 2-3 reviews the RCRA regulatory requirement that permit holders certify at least annually that (1) they have a program in place to reduce the volume and toxicity of hazardous waste generated; and (2) they have chosen the most practicable method currently available for treating, storing, or disposing of hazardous waste so as to minimize threat to human health and the environment. This module also addresses the requirement that RCRA permit applications contain exposure assessments.

Module 2-4 points out that RCRA permits are issued for fixed terms, not exceeding 10 years [40 CFR 270.50(a)]. At the end of a permit's term, either a permit renewal application must be submitted to the responsible regulatory agency or the facility must be closed. Module 2-4 discusses the required contents of renewal applications, the deadline for such applications, and the conditions under which expiring permits will continue until new permits have been issued.

Module 2-5 contains some common-sense suggestions intended to expedite processing of RCRA permit applications.

### **Chapter 3: Managing RCRA Permitting**

Chapter 3 consists of four modules that discuss planning for RCRA permitting, how RCRA permit applications are processed, the issuance of draft RCRA permits, and the duration and termination of RCRA permits. The purpose of the chapter is to place RCRA permitting of DOE TSDFs into the global context of environmental permitting. With this purpose in mind, Module 3-1 provides information to assist DOE personnel in (1) determining whether activities at a planned TSD unit at a new or existing facility require a RCRA permit; (2) ensuring that applicable non-RCRA requirements have been met; and (3) determining requisite public participation.

Module 3-2 covers RCRA permit application processing. The steps for permit processing mandated by 40 CFR parts 124 and 270 are covered, as are the provisions giving EPA the options to consolidate RCRA permit processing with the processing of environmental permits required by other laws. Suggestions are offered for interfacing with the responsible regulatory agency before and during agency handling of the application.

Module 3-3 reviews the administrative process whereby the responsible regulatory agency makes its final decision on whether to issue a draft RCRA permit or deny the

application. The regulatory provisions for public comment and hearings on draft RCRA permits are covered, as is the process for permit decision appeals.

Module 3-4 discusses the requirements for complying with the conditions of a permit during its term and the procedures used for terminating permits.

## **Chapter 4: RCRA Permit Modification**

During the term of a RCRA permit held by DOE, modifications to the permit may result from requests made by DOE, requests made by interested third parties, or initiatives of the responsible regulatory agency. Chapter 4 contains information on situations that may result in permit modifications and the regulations applicable to those situations.

Module 4-1 covers modifications made at the request of DOE, which may include modifications to (1) correct permit errors and accommodate routine facility changes (Class 1 modifications); (2) accommodate substantive facility changes needed to maintain the facility's capability to manage wastes safely or conform to new requirements (Class 2 modification); or (3) accommodate significant physical and operational facility changes (Class 3 modifications).

Module 4-2 covers the conditions under which modification, revocation and reissuance and termination for cause of RCRA permits may occur, either at the request of interested third parties or on the initiative of the responsible regulatory agency.

## **Chapter 5: Special Forms of Permits**

Chapter 5 contains three modules addressing (1) emergency permits; (2) research, development and demonstration (RD&D) permits; (3) and post-closure permits. Other special forms of RCRA permits that are also issued, but not discussed in Chapter 5, include permits by rule, hazardous waste incinerator permits, permits for land treatment demonstrations using field test or laboratory analyses, interim permits for underground injection control wells, and permits for boilers and industrial furnaces burning hazardous waste. RCRA permitting requirements for hazardous waste incinerators and boilers and industrial furnaces burning hazardous wastes are covered in Chapter 2. Permits by rule are not covered because (1) DOE is not expected to conduct operations that would qualify for two of the three available permits by rule (i.e., ocean disposal pursuant to an ocean dumping permit and injection well disposal pursuant to an underground injection permit), and (2) as federally owned treatment works (FOTWs), DOE treatment facilities holding NPDES permits do not fall within the scope of the third available permit by rule (i.e., publicly owned treatment works (POTWs) holding NPDES permits). Permits for land treatment demonstrations and interim

permits for underground injection control wells are not covered because DOE is not expected to conduct operations for which these special permits would be appropriate.

Module 5-1 explains the criteria for issuing emergency permits for periods of up to 90 days in situations involving imminent and substantial threat to human health or the environment.

Module 5-2 summarizes the regulatory requirements for obtaining RD&D permits that are issued to innovative and experimental hazardous waste treatment technologies or processes for which standards have not been promulgated.

Module 5-3 discusses RCRA post-closure permits, which govern the performance of post-closure care at facilities that have previously held RCRA operating permits, or have operated under interim status.

## **Chapter 6: Federal/State Authority and Implementation**

Chapter 6 briefly describes the provisions whereby EPA grants States and Territories authorization to implement the RCRA Subtitle C hazardous waste program within their boundaries. The scope of authorizations before and after Congress passed the Hazardous and Solid Waste Amendments of 1984 is addressed. Also discussed are RCRA permitting responsibilities in authorized State and Territories.

Module 6-1 explains that, before HSWA, States that applied and were found qualified by EPA to do so, could take over administration and enforcement of the RCRA Subtitle C program within their State boundaries entirely in lieu of the Federal program. This module also explains the three exceptions to this rule created by HSWA. In States that have received no RCRA program authorization at all, EPA administers the Federal RCRA Subtitle C program.

Module 6-2 discusses the apportionment of RCRA permitting responsibilities between EPA and the State in authorized States.

## **Chapter 7: Integration with Other Laws**

Chapter 7 reviews Federal laws, implementing regulations, and Executive Orders that were not addressed in Chapter 3. Included are the Atomic Energy Act (DOE Orders), the Archeological and Historic Preservation Act, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the Toxic Substances Control Act (TSCA), and Executive Orders 11988 "Floodplain Management," 11990 "Protection of Wetlands," 12088 "Federal Compliance with Right-to-Know Laws and Pollution Prevention" and 12898 "Federal Actions to Address Environmental Justice." Recommendations are made for interfacing these laws, implementing regulations and Executive Orders with RCRA permitting requirements.

## **References**

### **Statutes**

Resource Conservation and Recovery Act, P.L. 94-580, as amended.

Atomic Energy Act of 1954, P.L. 83-703, as amended.

### **Regulations**

10 CFR Part 962, "Byproduct Material."

40 CFR Part 124, "Procedures for Decisionmaking."

40 CFR Part 260, "Hazardous Waste Management System: General."

40 CFR Part 261, "Identification and Listing of Hazardous Waste"

40 CFR Part 262, "Standards Applicable to Generators of Hazardous Waste."

40 CFR Part 264, "Standards for Owners and Operators of Hazardous Waste Treatment, Storage and Disposal Facilities."

40 CFR Part 265, "Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage and Disposal Facilities."

40 CFR Part 268, "Land Disposal Restrictions."

40 CFR Part 270, "EPA Administered Permit Programs: The Hazardous Waste Permit Program."

40 CFR Part 271, "Requirements for Authorization of State Hazardous Waste Programs."

### **Federal Register**

51 FR 24504 (July 3, 1986), "EPA Clarification of Regulatory Authority Over Radioactive Mixed Waste."

52 FR 15937 (May 1, 1987), "Radioactive Waste; Byproduct Material."

55 FR 30798 (July 27, 1990), "Corrective Action for Solid Waste Management Units at Hazardous Waste Management Facilities; Proposed Rule."

56 FR 42730 (August 29, 1991), "Policy on Enforcement of RCRA Section 3004(j) Storage Prohibition at Facilities Generating Mixed Radioactive/Hazardous Wastes."

60 FR 40204 (August 7, 1995), "Joint NRC/EPA Guidance on the Storage of Mixed Low-Level Radioactive and Hazardous Waste, Draft for Comment."

61 FR 62153 (November 29, 1996), "Semiannual Regulatory Agenda, Environmental Protection Agency."

61 FR 19432 (May 1, 1996), "Corrective Action for Releases From Solid Waste Management Units at Hazardous Waste Management Facilities; Advance Notice of Proposed Rulemaking."

### **Other Publications**

U.S. Department of Energy, *Draft Waste Management Programmatic EIS for Managing Treatment, Storage and Disposal of Radioactive and Hazardous Waste* (DOE/EIS-0200-D, August 1995).

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# Interim Status

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# Key to the Graphic Approach

**Purpose:** Environmental requirements facing DOE facilities are often detailed, complex, and subject to change. Graphic (i.e., flowchart) guidance provides thorough and accurate guidance on environmental topics in an easily understandable format. Modules 1-1 and 1-2 of this guidance document use the graphic approach.

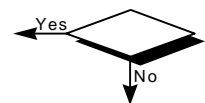
**Structure:** Modules 1-1 and 1-2 of this guidance document consists of the following elements:

- A diagram showing how the module corresponds to the regulatory issues addressed in other modules,
- Flowcharts presenting a decision process for applying the subject regulations, and
- On the pages opposite flowcharts, text providing supplemental information.

**Flowchart** The following symbols have been used in the flowcharts in Modules 1-1

**Symbols:** and 1-2 of this document:

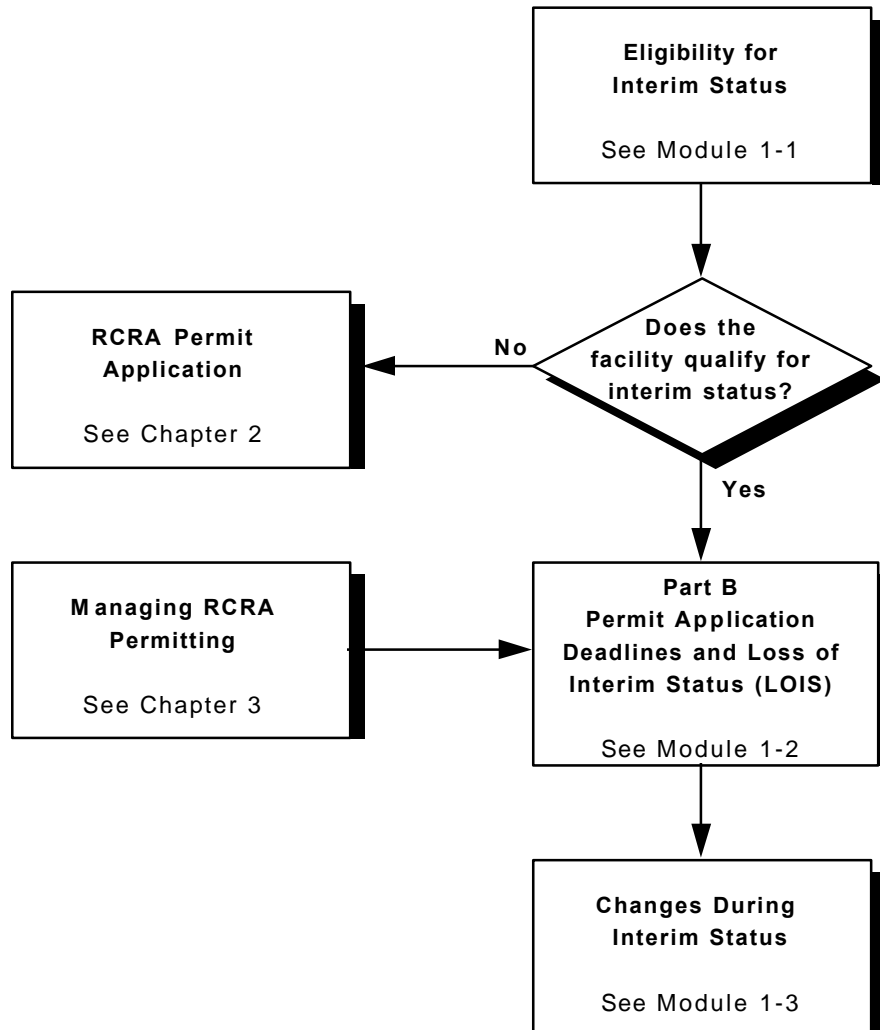
- Headings, to label sections of the flowchart and associated supplemental text;
- Ovals, labeled “Start,” representing the beginning of a flowchart;
- Diamonds, presenting the decision process;
- Step Numbers, to allow cross-referencing to other steps in the flowchart and between the flowchart and the supplemental text;
- Solid-Line Filled Polygons, containing “continued on,” “continued from,” or “go to” statements; and
- Solid-Line Rectangles, presenting results of the decision-making process.



**Step 1**



## Chapter 1: Interim Status



# INTERIM STATUS

## INTRODUCTION

Section 3005(a) of RCRA requires owners/operators of hazardous waste management facilities to obtain a RCRA permit. Section 3005(e) of RCRA provides that a hazardous waste management facility that meets certain requirements will be treated as having been issued a permit. This authorization to operate pending issuance or denial of a permit is known as "interim status." While operating under interim status, owners/operators must comply with the applicable sections of 40 CFR Part 265. This chapter discusses how owners/operators of hazardous waste management facilities become eligible for interim status, when they must apply for a permit, when interim status ends, and the circumstances under which changes to the facility and its operations may be made under interim status.

### **Module 1-1      Eligibility for Interim Status**

To qualify for interim status, the facility must be either an "existing hazardous waste management (HWM) facility" as defined in 40 CFR 270.2, or a facility in existence on the effective date of statutory or regulatory amendments that render the facility subject to RCRA permitting. According to 40 CFR 270.2, an existing HWM facility is a facility that was in operation, or for which construction commenced, on or before November 19, 1980 (the effective date of EPA's RCRA permitting regulations). EPA also allows radioactive mixed waste (RMW) facilities in operation, or under construction on or prior to July 3, 1986, to qualify for interim status. EPA considers such facilities to be eligible for interim status because July 3, 1986, was the date on which EPA officially announced that RCRA permitting requirements apply to RMW.



To obtain interim status, owners/operators of HWM facilities must comply with the notification of hazardous waste activity requirements under section 3010(a) of RCRA, and submit a RCRA Part A permit application under the requirements of 40 CFR 270.10. Any facility that has been previously denied a RCRA permit or has had its authority to operate under RCRA terminated is not eligible to obtain interim status. Such facilities must obtain a permit before they can operate.

### **Module 1-2      Part B Permit Application Deadlines and Loss of Interim Status (LOIS)**

A qualified interim status TSD facility may continue to operate until either a RCRA permit is issued, or interim status terminates in one of the ways described below. Any facility that loses interim status must be closed in accordance with the closure (and if applicable, post-closure) requirements of 40 CFR Part 265 (40 CFR 265.110).

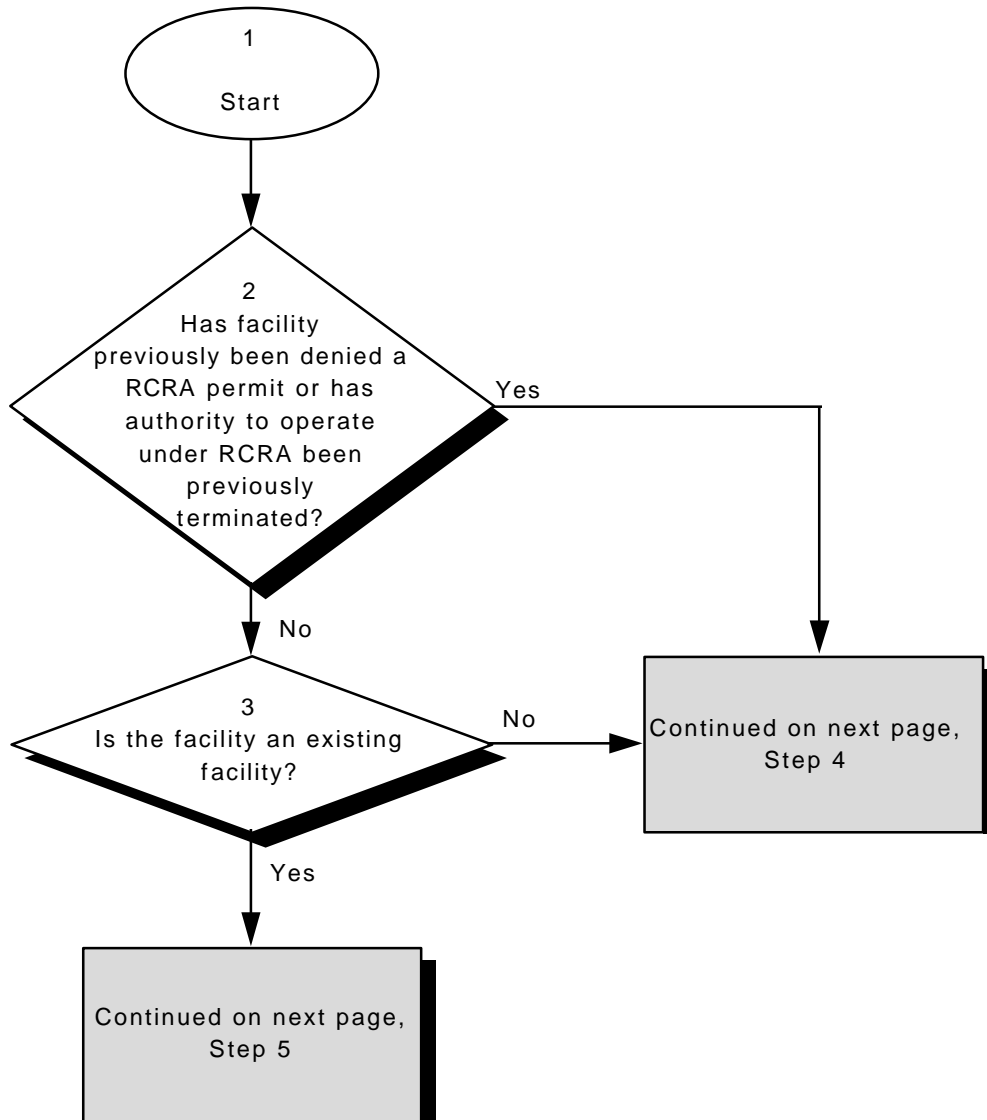
Interim status may be terminated if a facility: (1) fails to file a timely Part B permit application; (2) fails to furnish full information in a Part B permit application; or (3) conducts noncompliant operations. Filing deadlines and associated interim status termination dates for various facilities are presented in this module.

### **Module 1-3      Changes During Interim Status**

As long as the change does not amount to facility reconstruction, the owner/operator of a TSD facility can make changes to a facility during interim status. Before making such changes, however, the owner/operator must comply with specified requirements. This module describes regulatory requirements associated with making changes to interim status RCRA facilities.

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## Module 1-1: Eligibility for Interim Status





## **MODULE 1-1: Eligibility for Interim Status**

This module discusses how an owner/operator of an existing hazardous waste management facility qualifies for and obtains interim status to legally manage hazardous waste until a decision on the final operating permit is made.

### **Step 1      Start**

### **Step 2**      Previous denial or termination of a RCRA permit disqualifies a facility from interim status operation [40 CFR 270.70(c)].

Such facilities must obtain a RCRA permit before they can operate.

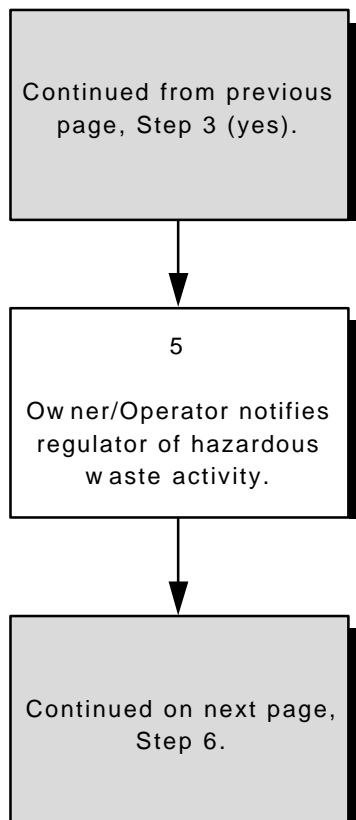
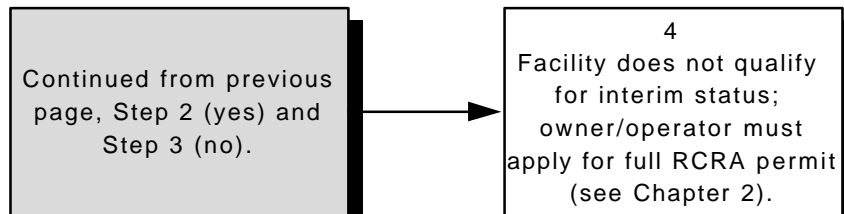
### **Step 3**      To qualify for interim status, a facility must be [40 CFR 270.70(a)]:

- an "existing hazardous waste management (HWM) facility or existing facility" as defined in 40 CFR 270.2; or
- in existence on the effective date of statutory or regulatory amendments under RCRA that render the facility subject to the requirement to have a RCRA permit.

According to 40 CFR 270.2, existing facilities are those HWM facilities which were in operation or for which construction commenced on or before November 19, 1980 (the effective date for initial regulations making HWM facilities subject to RCRA permitting). The deadlines for these facilities to submit a Part A permit application have passed (see Step 6). Therefore, all such facilities should now be operating under either interim status or a final permit.

However, since November 19, 1980, Congress and EPA have continued to make statutory and regulatory changes that identify new hazardous wastes. EPA anticipated that this would occur. Therefore, the RCRA regulations provide interim status eligibility for waste management facilities that exist on the date when the waste they are managing becomes hazardous [40 CFR 270.70(a)].

A recent example of a regulatory change that brought previously non-hazardous wastes under RCRA subtitle C hazardous waste regulation for the first time occurred when EPA revised the hazardous waste toxicity characteristic in 1990 [55 FR 11798 (Mar. 29, 1990)]. At that time, the agency changed the analytical procedure used to evaluate waste toxicity and increased the number of organic



constituents analyzed. As a result, the status of some wastes changed from non-hazardous to hazardous, and the facilities managing them became subject to RCRA permitting requirements. Such facilities were "existing" for purposes of determining eligibility for interim status.

#### **Step 4**

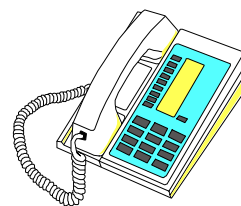
Owners/operators of HWM facilities that require a permit but do not qualify for interim status must submit both Part A and Part B of the permit application simultaneously and receive a final permit before performing any activity that is subject to RCRA permitting. Owners/operators of HWM facilities not eligible for interim status may still conduct hazardous waste management activity that does not require a permit (e.g., treatment in generator 90-day accumulation tanks or containers) [40 CFR 264.1(g)].

#### **Step 5**

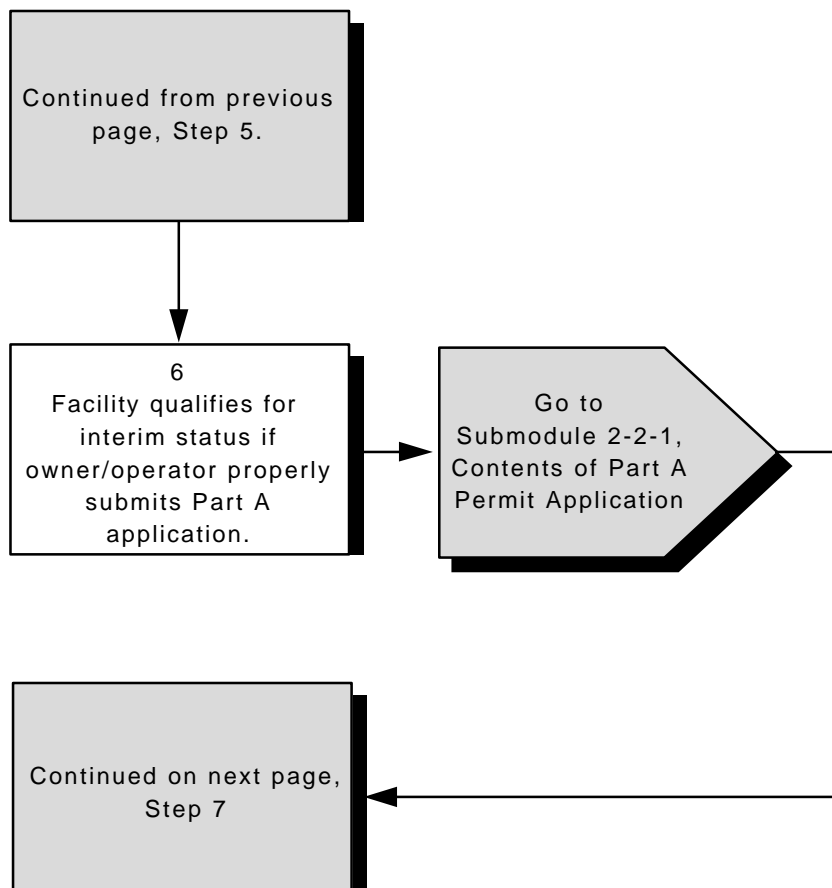
To qualify for interim status, owners/operators of existing facilities must comply with RCRA section 3010(a) pertaining to notification of hazardous waste activity [40 CFR 270.70(a)(1)]. RCRA section 3010(a) requires that this notification be submitted within 90 days of the promulgation of the regulation that renders the facility subject to RCRA subtitle C. A copy of EPA Form 8700-12 is located in Appendix IV.

The federal form for complying with this requirement is EPA Form 8700-12, *Notification of Regulated Waste Activity*. However, many States have adopted hazardous waste management requirements that are different from Federal requirements. Such States may require either the use of EPA Form 8700-12 or a similar state form requesting information consistent with the state requirements.

DOE managers should contact the appropriate EPA region or State to obtain the applicable and latest version of the form for notifying under RCRA 3010(a).



Owners/operators who perform this notification will receive an EPA identification (ID) number for their facility. This EPA ID number must be referenced in all subsequent RCRA permitting documents related to the facility, including the Part A and Part B Permit Applications (see Module 2-2-1, Completing the Part A Permit Application, and Module 2-2-2, Completing the Part B Permit Application).



#### **RMW Note**

Facilities managing only RMW in states with base RCRA but no RMW authority need not obtain interim status (see Chapter 6).

**RMW Note** There are some States that have been authorized by EPA to implement the base RCRA program, but do not have EPA-delegated authority to regulate RMW under that program. In such States, RMW is not regulated under RCRA (although it may be regulated pursuant to state law). Facilities managing only RMW in these States may not be required to obtain interim status (see Appendix III for base RCRA and mixed waste authorization status of States). Therefore, if a DOE facility that manages only RMW is located in a State with RCRA base authorization, but not RMW authorization, DOE personnel responsible for RCRA permitting should contact state regulators to find out what, if any, interim status requirements apply to RMW in that State.



***For more information on state authority to implement RCRA, go to Chapter 6, Federal/State Authority and Implementation.***

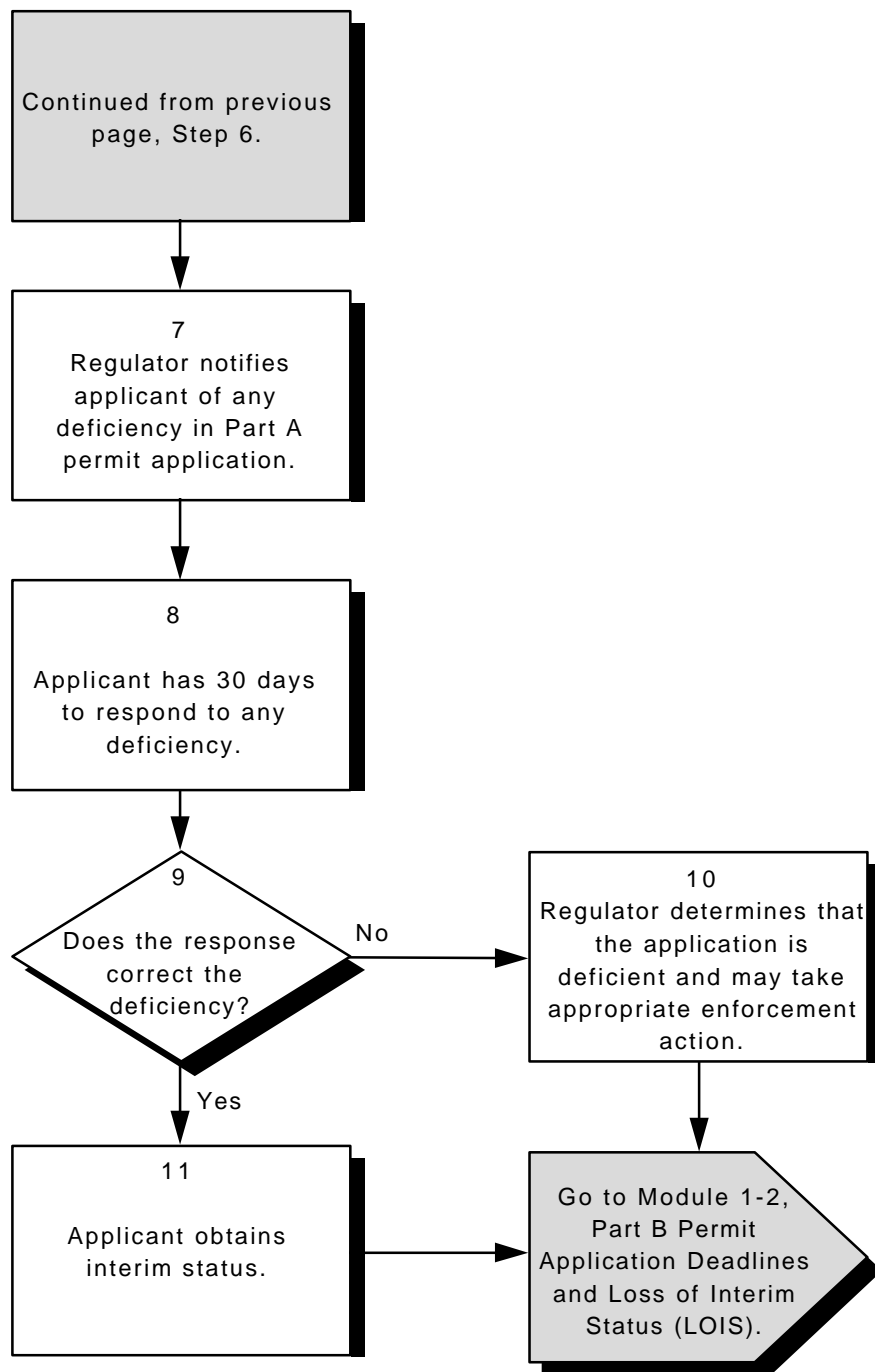
**Step 6**

To qualify for interim status, the owner/operator of a facility in existence on the effective date of statutory or regulatory amendments rendering the facility subject to RCRA permitting must submit a Part A permit application [40 CFR 270.70(a)(2)]:



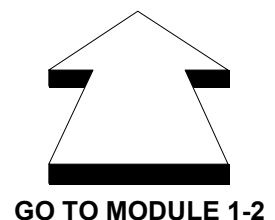
- within six months after the date of publication of regulations which first require the facility to comply with 40 CFR 265 or 266 standards [40 CFR 270.10(e)(1)(i)]; or
- within 30 days after the date on which the facility becomes subject to 40 CFR 265 standards, whichever first occurs [40 CFR 270.10(e)(1)(ii)].

There are two dates because changes to the RCRA statute could subject a facility to RCRA permitting requirements; such changes might not require the publication of regulations amending 40 CFR 265 standards. These deadlines can be extended for specified classes of HWM facilities through publication of a *Federal Register* notice [40 CFR 270.10(e)(2)], or for individual HWM facilities through a compliance order issued under RCRA section 3008 [40 CFR 270.10(e)(3)].

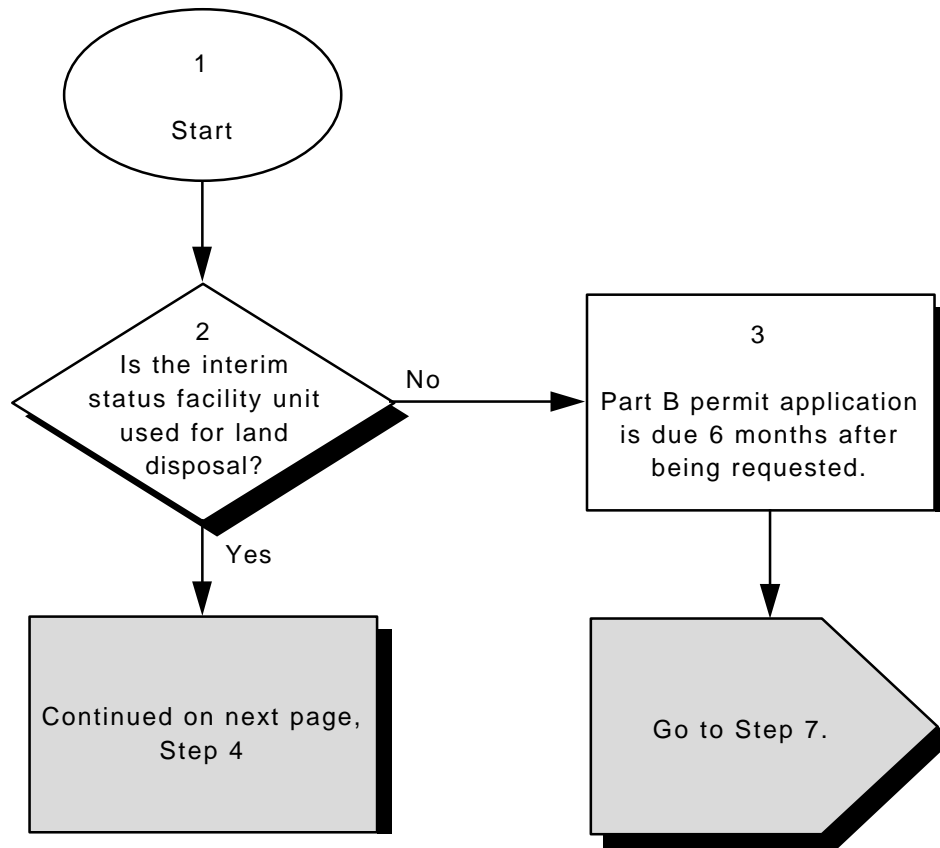


- Step 7** After receiving the Part A permit application from the applicant, the regulator reviews the application for completeness. If the application is not complete, the regulator notifies the applicant in writing of the apparent deficiency. Such notices must specify the grounds for the regulator's belief that the application is deficient [40 CFR 270.70(b)].
- Step 8** The applicant has 30 days from receipt of the notice to explain or correct the alleged deficiency in the Part A permit application [40 CFR 270.70(b)].
- Step 9** After receiving the applicant's response, the regulator determines if the application is still deficient [40 CFR 270.70(b)].
- Step 10** If the applicant does not correct the identified deficiencies, the regulator may take appropriate enforcement action [40 CFR 270.70(b)]. This may include ordering the facility to stop all hazardous waste management activity that is subject to RCRA permitting, terminating the facility's interim status, and ordering the facility's hazardous waste management units to close in accordance with the interim status requirements in 40 CFR Part 265.
- Step 11** During interim status, the facility is treated as having a RCRA permit [40 CFR 270.70(a)]. Operations are limited to the wastes, processes and design capacities specified in the Part A permit application [40 CFR 270.71(a)], and compliance with the interim status standards found in 40 CFR Part 265 is required [40 CFR 270.71(b)]. Interim status terminates when a final permit is issued or denied, or when the regulator finds that the facility has not complied with the conditions of interim status.

***For more information, go to Module 1-2, Part B Permit Application Deadlines and Loss of Interim Status (LOIS).***



## Module 1-2: Part B Permit Application Deadlines and Loss of Interim Status (LOIS)





## **MODULE 1-2: Part B Permit Application Deadlines and Loss of Interim Status (LOIS)**

This module discusses when applicants operating under interim status must submit their RCRA Part B permit application. This module also describes the circumstances under which interim status may be terminated prior to final administrative disposition of a final permit.

### **Step 1      Start**

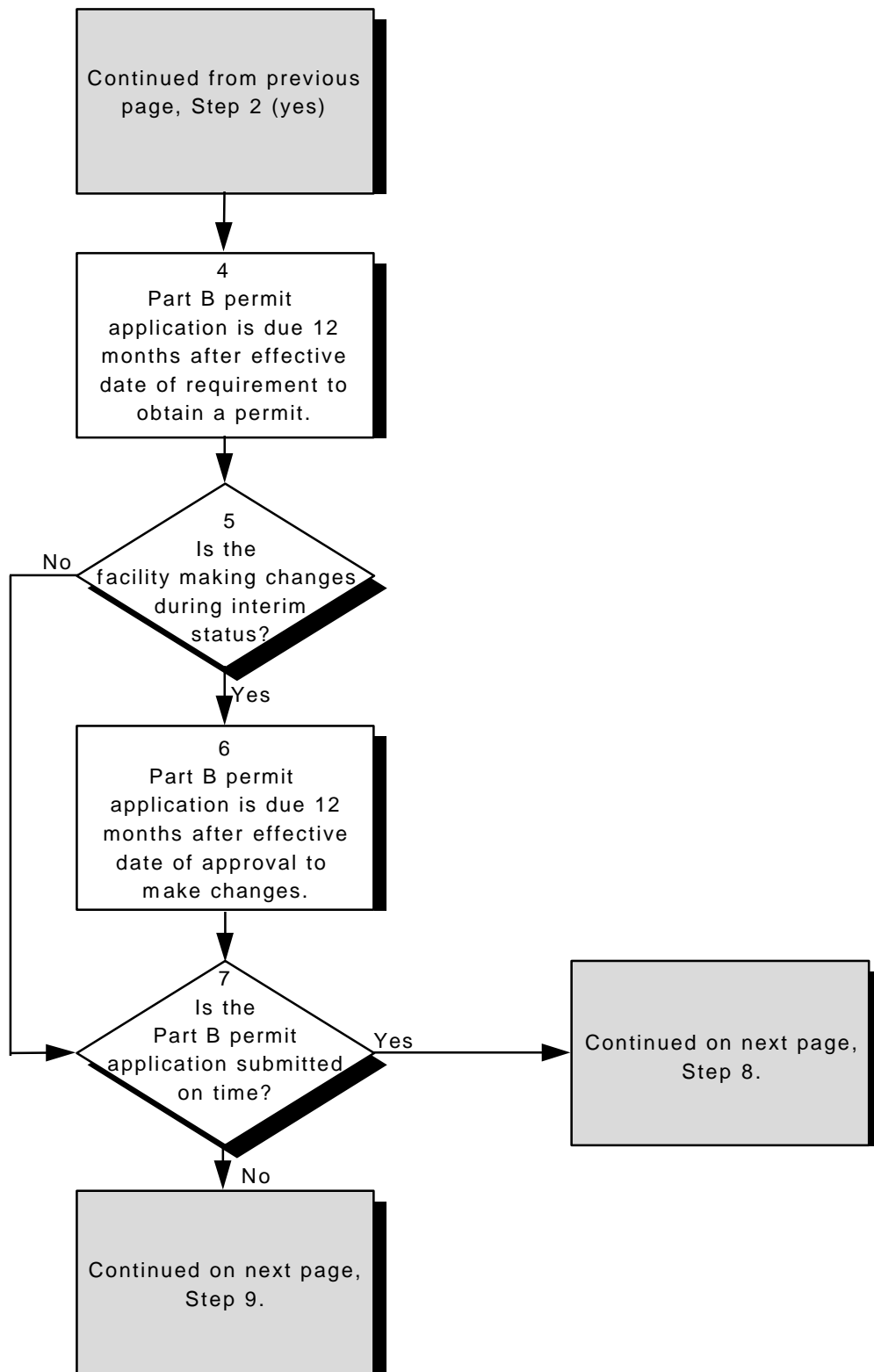
**Step 2**      40 CFR 270.73 provides Part B permit application submittal deadlines. The deadlines for all facilities that achieved interim status before November 8, 1984 have passed. Therefore, any DOE HWM Facility in this group should have already filed its Part B permit application. After November 8, 1984 the Part B permit application filing deadline for a solid waste management facility that already exists on the effective date of a statute or regulation rendering it subject to RCRA hazardous waste permitting requirements depends on whether the facility is a "land disposal facility" (i.e., waste managed there is placed intentionally into or on the land and will remain after the facility closes) (40 CFR 260.10).

Prior to EPA's publication of a July 3, 1986, *Federal Register* notice stating that RMW was regulated under RCRA, there was confusion on the applicability of RCRA requirements to RMW. A *Federal Register* notice published by EPA on September 23, 1988 [53 FR 37045], specifically addressed the permit application deadlines that would have to be met for RMW management units to retain interim status. Permit application deadlines for DOE's hazardous and RMW units are summarized on Exhibit 1-1, located at the end of this module.



**Step 3**      If a waste management facility, other than a land disposal unit, already exists on the effective date of the statute or regulation that creates the requirement for it to obtain a RCRA permit, the owner/operator can obtain interim status by filing a RCRA 3010 notice within 90 days, filing a Part A permit application within the appropriate time frame (see module 1-1, step 6), and complying with the applicable standards in 40 CFR Part 265. Subsequently, the facility can continue to operate without filing a Part B permit application until six months after the responsible regulatory agency requests submission of the application. There is no mandatory time within which the responsible agency must act to "call in" a Part B permit application. Therefore, some interim status facilities may operate for many years without obtaining a final RCRA permit. However, the owner/operator of an HWM facility can

voluntarily submit a Part B permit application at anytime during interim status, regardless of whether or not the responsible agency requests it.



- Step 4** The deadline for submitting a Part B permit application for a land disposal facility in existence on the effective date of a statutory or regulatory amendment rendering the facility subject to RCRA permitting, is 12 months after the date on which the facility first becomes subject to such permit requirements. Interim status will terminate on that date unless (1) the owner/operator submits the Part B permit application, and (2) certifies that the facility is in compliance with all applicable groundwater monitoring and financial responsibility requirements for interim status facilities in 40 CFR Part 265 [40 CFR 270.73(d)]. Federal facilities are not subject to financial assurance requirements.
- Step 5** Owners/operators who make changes to land disposal units at facilities operating under interim status have extra time to submit the Part B permit application **for the modified disposal units**.
- Step 6** For owners/operators of any land disposal unit that is granted authority to operate after making facility changes during interim status, interim status will terminate on the date 12 months after the effective date of such approval, unless the owner/operator certifies that the changed unit is in compliance with all applicable groundwater monitoring and financial responsibility requirements [40 CFR 270.73(e)]. (Federal facilities are not subject to financial assurance requirements). However, **applicants must still make their original Part B submittal deadline for the unmodified portions of the facility**; this provision allows extra time to incorporate modified portions of the facility into the Part B permit application.
- Step 7** Failure to furnish a requested Part B permit application on time is grounds for termination of interim status [40 CFR 270.10(e)(5)].

Continued from previous  
page, Step 7 (yes).



8  
Facility continues to  
operate under interim  
status until permit is  
issued or denied.



Go to Module 1-3,  
Changes During  
Interim Status, or  
Module 3-1, Permit  
Application Review.

Continued from previous  
page, Step 7 (no).



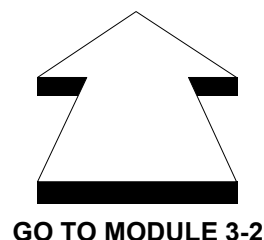
9  
Facility loses interim  
status.

**Step 8** Any Interim status HWM facility that meets all Part A and Part B application filing deadlines and any other applicable notification and certification requirements can continue operating until a final RCRA permit is either issued or denied. The regulations establish no limitations on the length of interim status operation, but during interim status, the owner/operator must comply with the applicable standards in 40 CFR Part 265.

**Step 9** If the owner/operator of any interim status HWM facility fails to submit the Part B permit application on time, the facility will lose interim status. Land disposal facilities can also lose interim status by failing to demonstrate compliance with the applicable groundwater monitoring and financial assurance requirements.

Interim status may also be terminated for other reasons as well. For example, failure to submit a **complete** Part B permit application is cause for termination of interim status [40 CFR 270.10(e)(5)].

***For more information on completeness reviews of Part B permit applications, go to Module 3-2, RCRA Permit Application Processing.***




In addition, RCRA provides regulators with enforcement authority to issue compliance orders under section 3008(a) to interim status facilities that do not comply with the applicable 40 CFR Part 265 standards. Illegal operation of a hazardous waste management facility can lead to fines, criminal penalties, imprisonment, or permit denial and termination of interim status.

After losing interim status, owner/operators are still subject to RCRA standards for hazardous waste management. As such, any facility that loses interim status must be closed in accordance with the closure (and if applicable, post-closure) requirements of 40 CFR Part 265.

DOE guidance entitled *Closure of Hazardous and Mixed Radioactive Waste Management Units at DOE Facilities* [DOE/EGD(RCRA)-002/0690, June 1990] describes closure requirements.

**EXHIBIT 1-1**  
**PART B PERMIT APPLICATION DEADLINES FOR HAZARDOUS WASTE AND RMW MANAGEMENT UNITS**  
**TO AVOID LOSS OF INTERIM STATUS**

Type of Waste Managed	RCRA Authorization Status of State/ Territory in Which Unit is Located	Type of Unit	Part B Permit Application Deadline	Date Interim Status Terminates if Deadline is Missed
Hazardous Waste	Does not matter	Land disposal unit that achieved interim status before 11/8/84	11/8/85	11/8/85
		Incinerator unit that achieved interim status before 11/8/84	11/8/86	11/8/89
		Treatment and storage units, except incinerators, that achieved interim status before 11/8/84	11/8/88	11/8/92
		Land disposal unit in existence on the effective date of a statute or regulation rendering the unit subject to RCRA permitting	12 months after the date on which the unit became subject to RCRA permitting	Same date as permit application deadline
		All units, except land disposal units, in existence on the effective date of the statute or regulation rendering the unit subject to RCRA permitting	Within 6 months after the date on which the responsible regulatory agency requests submission	Same date as permit application deadline
Radioactive Mixed Waste  	States/Territories not authorized to administer the base RCRA program as of 9/23/88	Land disposal unit	9/23/89	9/23/89
		All units except land disposal units	Date established by EPA Regional Office	Date established by EPA Regional Office
	States/Territories authorized for the base RCRA program, but not for RMW	All units	No Federal date*	No Federal date*
	States/Territories authorized to administer RMW program	Land disposal units	1 year after effective date of the State's/Territory's RMW authorization	Same date as permit application deadline
		All units, except land disposal units	Date established in the authorized State/Territorial program	Date established in the authorized State/Territorial program

\* State/Territory laws could have an effect on the ability of RMW units in these States/Territories to continue to operate.

## MODULE 1-3: Changes During Interim Status

Exhibit 1-2 summarizes the regulatory requirements associated with changes during interim status. In developing these requirements, EPA tried to strike the proper balance between:

- allowing owners/operators of interim status units to make necessary or beneficial changes to interim status units with minimal regulator involvement, and
- preventing owners/operators of interim status units from making major changes before these units are permitted.

Minor Changes to Interim Status Units are Relatively Easy to Make

As shown on Exhibit 1-2, certain minor changes can be made during interim status as long as a revised Part A permit application is submitted. Exhibit 1-2 also shows that the regulations circumscribe the major changes that can be made during interim status in the following manner.

Reconstruction is Strictly Limited

- For changes that amount to reconstruction, the types of changes allowed are strictly limited. Reconstruction occurs when the capital investment in the changes to the facility exceeds 50 percent of the capital cost of a comparable entirely new unit [40 CFR 270.72(b)].

Increase in Design Capacity Requires a Justification

- If the change involves an increase in the design capacity of hazardous waste management units or changes to/addition of process units, the owner/operator must submit a justification for the changes [40 CFR 270.72(a)(2) and 40 CFR 270.72(a)(3)].

The Regulator is Precluded From Approving Some Changes

- The regulator is precluded from approving changes involving increases in design capacity of hazardous waste management units unless the justification provided by the owner/operator under 40 CFR 270.72(a)(2) involves a lack of available hazardous waste management capacity, or the change is necessary to comply with a Federal, state, or local requirement [40 CFR 270.72(a)(2)(ii) and (iii)].



**EXHIBIT 1-2**  
**SUMMARY OF REGULATORY REQUIREMENTS ASSOCIATED WITH CHANGES DURING INTERIM STATUS**

<b>Change*</b>	<b>Citation (40 CFR)</b>	<b>Regulatory Requirements Associated with Change</b>
Commence treatment, storage, or disposal of new hazardous wastes	270.72(a)(1)	<ul style="list-style-type: none"> <li>• Submit a revised Part A permit application prior to treatment, storage, or disposal</li> </ul>
Increase in the design capacity of processes used at the facility	270.72(a)(2)	<ul style="list-style-type: none"> <li>• Submit a revised Part A permit application prior to such change</li> <li>• Submit a justification explaining the need for the change</li> <li>• The regulator may approve the change if there is a lack of available treatment, storage, or disposal capacity at other hazardous waste management facilities or the change is necessary to comply with a Federal, state, or local requirement</li> </ul>
Changes in/addition of processes for the treatment, storage, or disposal of hazardous waste	270.72(a)(3)	<ul style="list-style-type: none"> <li>• Submit a revised Part A permit application prior to such change</li> <li>• Submit a justification explaining the need for the change</li> <li>• The regulator may only approve the change if it is necessary to prevent a threat to human health and the environment because of an emergency situation or the change is necessary to comply with a Federal, state, or local requirement</li> </ul>
Changes in the ownership or operation control of the facility	270.72(a)(4)	<ul style="list-style-type: none"> <li>• Submit a revised Part A permit application no later than 90 days prior to the scheduled change**</li> </ul>
Changes made in accordance with an interim status corrective action order***	270.72(a)(5)	<ul style="list-style-type: none"> <li>• Changes are limited to the treatment, storage, or disposal of solid waste from releases that originate within the facility boundary</li> <li>• Comply with notification requirements, if any, of the order</li> </ul>
Addition of newly regulated units for the treatment, storage, or disposal of hazardous waste	270.72(a)(6)	<ul style="list-style-type: none"> <li>• Submit a revised Part A permit application on or before the date on which the unit became subject to the new requirements</li> </ul>

# EXHIBIT 1-2 (Cont d.)

Change*	Citation (40 CFR)	Regulatory Requirements Associated with Change
Changes that amount to reconstruction of the hazardous waste management facility****	270.72(b)	<p>Only the following changes may be made:</p> <ul style="list-style-type: none"> <li>• Changes to comply with the requirements of 40 CFR 265.193 for tanks and ancillary equipment</li> <li>• Changes that are necessary to comply with Federal, state, or local requirements as long as the changes are to an existing unit, and solely involve tanks or containers or addition of replacement surface impoundments that satisfy Section 3004(o) of RCRA</li> <li>• Changes necessary to allow owners/operators to continue handling newly listed or identified hazardous wastes that have been treated, stored, or disposed of at the facility prior to the effective date of the rule establishing the new listing or identification</li> <li>• Changes during closure of a facility or a unit within the facility in accordance with an approved closure plan</li> <li>• Changes necessary to comply with an interim status corrective action order provided that changes are limited to the treatment, storage, or disposal of solid waste that originate within the boundary of the facility***</li> <li>• Changes to treat or store hazardous wastes subject to the land disposal restriction in 40 CFR 268 or RCRA Section 3004 in tanks, containers, or containment buildings (provided that the changes are made solely to comply with 40 CFR 268 or RCRA Section 3004)</li> </ul>

- \* Check all rows that may be relevant. For example, if a change involves the reconstruction of a facility to commence treatment of new hazardous waste, a revised Part A must be submitted and the change must be one of those listed under 40 CFR 270.72(b).
- \*\* The old owner/operator must continue to comply with the requirements of 40 CFR 265, Subpart H (Financial Requirements) until the new owner/operator complies with these requirements. However, DOE and other Federal agencies are exempt from these requirements.
- \*\*\* The corrective action order may be issued by EPA under Section 3008(h) or other Federal authority, by an authorized State under comparable state authority, or by a court in a judicial proceeding brought by EPA or an authorized State.
- \*\*\*\* Reconstruction occurs when the capital investment in the changes to the facility exceeds 50 percent of the capital cost of a comparable entirely new, hazardous waste management facility.

- The regulator is precluded from approving changes involving changes to/addition of process units unless the justification provided by the owner/operator under 40 CFR 270.72(a)(3) involves preventing a threat to human health and the environment in an emergency situation, or the change is necessary to comply with a Federal, state, or local requirement [40 CFR 270.72(a)(3)(ii) and (iii)].

DOE managers should note that a change amounting to reconstruction may not be made during interim status even if the primary purpose of the change is to improve protection of human health and the environment, unless the change is one of those listed in 40 CFR 270.72(b).

There are Filing Deadlines  
for Amended Part A  
Applications With Newly  
Listed/Identified Wastes

Regulations promulgated in 40 CFR 270.10(g) contain additional requirements applicable to the filing of amended Part A applications to include newly listed or identified hazardous wastes.

- If the facility is located in an unauthorized State, the amended Part A permit application must be filed with the Regional Administrator within six months of the promulgation of regulations listing or identifying new hazardous waste [40 CFR 270.10(g)(1)(i)].
- If the facility is located in an authorized State, the amended Part A permit application must be filed with the state agency no later than the effective date of the regulatory provisions listing or identifying new hazardous waste [40 CFR 270.10(g)(1)(ii)].

Interim status does not extend to include newly listed or identified hazardous wastes at the facility unless an amended Part A permit application is filed with the appropriate regulatory agency by the deadlines listed above [40 CFR 270.10 (g)(2)].

***Chapter 6 contains additional information on Federal/State authority and implementation.***



## REFERENCES

### Statutes

Resource Conservation and Recovery Act, P.L. 94-580, as amended.

### Regulations

40 CFR Part 260, "Hazardous Waste Management System: General."

40 CFR Part 265, "Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Units."

40 CFR Part 270, "EPA Administered Permit Programs: The Hazardous Waste Permit Program."

### Federal Register

53 FR 37054 (September 23, 1988), RCRA Permit Application Deadlines for RMW Management Units.

55 FR 11798 (March 29, 1990), Toxicity Characteristic Rule.

### Other Publications

U.S. Department of Energy, *Closure of Hazardous and Mixed Radioactive Waste Management Units at DOE Facilities* [DOE/EGD(RCRA)-002/0690, June 1990].

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# Chapter 2

## RCRA Permit Application

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# **RCRA PERMIT APPLICATION**

## **INTRODUCTION**

This chapter discusses RCRA permit application deadlines for new facilities, the contents of RCRA permit applications, waste minimization certifications and exposure assessments that must accompany RCRA permit applications, RCRA permit reapplication procedures, and suggestions for submitting completed permit applications or reapplications to regulatory agencies.

### **Module 2-1 Permit Application Deadlines for New Facilities**

New hazardous waste treatment, storage, and disposal (TSD) facilities must submit both the Part A and Part B permit applications to the regulatory agency at the same time. The Part A and Part B permit applications must be submitted at least 180 days before construction of the facility is expected to begin [40 CFR 270.10(f)].

### **Module 2-2 Information Required in a RCRA Permit Application**

The RCRA permit application consists of two parts - Part A and Part B. The Part A permit application is a standard form that requests general information about the facility and its operations. A copy of the Part A application (EPA Form 3510) and EPA's line-by-line instructions for completing the form is contained in Appendix TBD. Submodule 2-2-1 contains additional information about the Part A permit application.

The RCRA Part B permit application provides comprehensive information about the facility and has no standard format. Some of the required information in the Part B application is common to all types of facilities (e.g., facility description, waste analysis plan, description of security procedures and equipment, general inspection schedule, etc.) while other information items are specific to the types of units included in the application. Common information items are outlined in 40 CFR 270.14, "Contents of Part B: General Requirements." Unit-specific information requirements are located in 40 CFR 270.15 through 270.26.

Most facility owners/operators use standardized checklists to assemble all of the necessary parts of the Part B permit application. This approach is also recommended for DOE site personnel. Submodule 2-2-2 contains additional information about the general and unit-specific requirements applicable to the submission of Part B permit applications and the use of standardized checklists to assemble the application. Appendix II contains the EPA Headquarters RCRA Part B permit application checklist.

### **Module 2-3 Waste Minimization and Exposure Assessment**

This module briefly describes the waste minimization certification and exposure assessment that must be submitted to the responsible regulatory agency to receive a

RCRA permit. The exposure assessment requirement is applicable to owners/operators of surface impoundments and landfills.

## **Module 2-4 Reapplication**

Module 2-4 addresses the RCRA permit reapplication process. RCRA permits are effective for a fixed term. If DOE holds an expiring RCRA permit and intends to continue permitted activities beyond the expiration date, DOE personnel responsible for RCRA permitting must submit a renewal application. The renewal application must be filed at least 180 days before the permit's expiration date, unless permission to submit the renewal application at a later date is formally granted by the responsible regulatory agency.

## **Module 2-5 Submitting RCRA Permit Applications or Renewal Applications**

Module 2-5 contains several suggestions applicable to submitting completed RCRA permit applications or reapplications that may help to expedite the permitting process.

## **Related Topics**

The information applicable to permit application deadlines (Module 2-1) is pertinent whenever a DOE site plans to construct a new TSD unit and either does not already have a RCRA permit, or the existing permit will not be modified to include the new unit. In such cases, permit application deadlines for new facilities are applicable. RCRA permit application deadlines for existing TSD units operating under interim status are addressed in Module 1-2.

If a DOE site already has a RCRA permit and wants to add a new TSD unit to the existing permit, a Class 3 permit modification would be required. Class 3 permit modifications are addressed in Module 4-3-3.

With the concurrence of the regulatory agency, DOE may include all of the hazardous waste management units planned for one site in one permit application, or may submit separate applications for different units. In deciding whether one or more than one permit application is appropriate, site personnel may want to consider the practical/logistical aspects associated with performing different hazardous waste operations under one or more permits. Practical/logistical considerations may differ according to whether different units will be:

- performing related or unrelated operations,
- treating/storing/disposing of the same or different waste streams,
- managed/operated by the same or different contractor organizations, and

- located in close proximity to or far from one another.

The site's strategy and rationale should be shared with the responsible regulatory agency as soon as possible. Chapter 3, Managing the Permitting Process, presents additional information about negotiating permit coverage with regulators.

## MODULE 2-1: Permit Application Deadlines for New Facilities

General Rule: No  
Construction Without a  
RCRA Permit

The initiation of physical construction (i.e., excavation, earth movement, erection of structures) of any new hazardous waste TSD unit without an effective permit [40 CFR 270.10(f)(1)] is prohibited. The Federal RCRA regulations also specify that a RCRA permit application must be submitted at least 180 days before physical construction is expected to begin [40 CFR 270.10(f)(2)].

Exception: PCB Incinerators

The one exception to these requirements involves application for a RCRA permit to burn hazardous wastes in an incinerator that is already authorized to incinerate polychlorinated biphenyls (PCBs) under Section 6(e) of the Toxic Substances Control Act (TSCA) [40 CFR 270.10(f)(3)]. DOE may apply for a RCRA permit to incinerate hazardous waste in a TSCA-authorized PCB incinerator at any time after construction or operation of the facility has begun. Before the facility actually begins incinerating hazardous waste, however, the RCRA permit must be issued [40 CFR 270.10(f)(3)].

Facility Conversion Requires  
New Permit

The Federal RCRA regulations do not specifically address the situation of converting an existing facility (e.g., a warehouse or a 90-day storage pad) to a RCRA permitted facility if the facility is not eligible for interim status. Consequently, owners/operators of such facilities must upgrade and permit them as if they are new facilities. In this situation, the RCRA permit application should describe the existing facility and the modifications planned to bring the facility into compliance with applicable standards.

Schedule Considerations:  
Getting a RCRA Permit  
Takes a Long Time

Experience has shown that it takes more than 180 days to negotiate all but storage RCRA permits with regulatory agencies. The requirement mentioned above, that RCRA permit applications be submitted 180 days prior to the expected start of construction, was promulgated on May 19, 1980 (45 FR 33154), before EPA had any implementation experience with RCRA permitting. EPA argued that 180 days was necessary to provide adequate time for public notice and comment, hold public hearings if necessary, and complete an evaluation of the permit application. At that time, EPA believed that permit processing time for a large facility would probably be a small part of the total time needed for design, financing,

and obtaining other approvals for the facility [45 FR 33154, 33323 (May 19, 1980)]. The large size of many DOE sites, the complexity of DOE's operations, and the presence of mixed waste streams at DOE facilities can cause permit negotiations for DOE-owned TSD units to take much longer than for TSD units owned by private-sector firms. For this reason, DOE site personnel should not expect to begin physical construction of a new RCRA unit 180 days after submitting a RCRA permit application to the responsible regulatory agency.



Other Requirements Must Be Satisfied Before a New RCRA Unit is Constructed

Independent of obtaining a RCRA Permit DOE site personnel must also ensure that non-RCRA requirements applicable to a planned TSD unit have been satisfied before construction begins. Chapter 3 provides information to aid DOE and DOE contractor personnel in identifying such requirements that may be imposed by other Federal laws. Chapter 7 identifies potentially applicable DOE orders.

***See Chapter 3 for a discussion of requirements of other Laws.***



***See Chapter 7 for a discussion of DOE directives.***



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## MODULE 2-2: Information Required in a RCRA Permit Application

Part A --  
See Module 2-2-1

Exhibit 2-1 provides an overview of the contents of RCRA Part A and Part B permit applications. The Part A information requirements are specified in 40 CFR 270.13 and are reproduced on EPA Form 8700-23 (see Appendix I). Module 2-2-1 provides information about filling out the Part A application form that is not covered by the instructions accompanying EPA Form 8700-23, and that is particular to DOE facilities.

Part B --  
See Module 2-2-2

The Part B information requirements are specified in 40 CFR 270.14 through 270.26. However, there is no standardized format for RCRA Part B applications. Module 2-2-2 provides information for evaluating the completeness and technical adequacy of the general and facility or unit-specific information that must be presented in the Part B permit application. It also identifies the regulatory requirements applicable to preparing different sections of the Part B permit application.

Permit Applications in RCRA  
Authorized States

RCRA permit applications for facilities located in RCRA authorized States must be prepared in accordance with the specific RCRA permit application requirements, if any, of the State. DOE managers responsible for assembling RCRA permit applications for facilities in RCRA authorized States should contact the state hazardous waste management agency to obtain the:



- RCRA Part A permit application form required by the State, and
- RCRA Part B application checklist used by the State, if one is available.

Because there is no standardized form or format for RCRA Part B applications, the state checklist can serve as a valuable tool for deciding how to organize the required material.



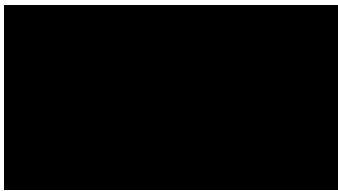
**EXHIBIT 2-1**  
**OVERVIEW OF THE CONTENTS OF RCRA PERMIT APPLICATIONS**

<b>Part B</b>		
<b>Part A (40 CFR 270.13)</b>	<b>Information Addressing General Requirements (40 CFR 270.14)</b>	<b>Information Addressing Specific Requirements Applicable to the Units Listed (40 CFR 270.15-270.26)</b>
Installation EPA ID # Name of Facility Facility Location Facility Mailing Address Facility Contact Facility Contact Address Operator Information Facility Owner SIC Codes Existing Environmental Permits Nature of Business Process Codes and Design Capacities Additional Treatment Processes Description of Hazardous Wastes Map Facility Drawing Photographs Certification(s) Comments	Facility Description Waste Characterization Process Information Groundwater Monitoring Procedures to Prevent Hazards Contingency Plan Personnel Training Closure Plans Post-Closure Plans Financial Assurance for Closure, Post Closure, and Third Party Liability* Corrective Action for Solid Waste Management Units Public Participation Part B Certification Other Federal Laws	Containers Tank Systems Surface Impoundments Waste Piles Incinerators Land Treatment Facilities Landfills Boilers and Industrial Furnaces Miscellaneous Units Process Vents Equipment Subject to Standards for Equipment Leaks Drip Pads Air Emission Standards for Containers, Tanks, and Surface Impoundments Containment Buildings

\* Not required for Federal Facilities.

If the State does not have its own RCRA Part A application form or Part B permit application checklist, the EPA Part A application form and EPA Part B regional checklists may be used. If neither the EPA Region nor the State has a RCRA Part B application checklist, DOE personnel responsible for assembling RCRA permit applications should consult with the responsible regulatory agency concerning how the material in the application should be organized.

Chapter 6 provides information on RCRA state authorization status.



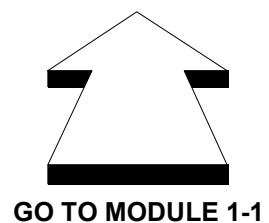
When to File a Part A

A first-time Part A application, or a modified Part A application, must be filed when:

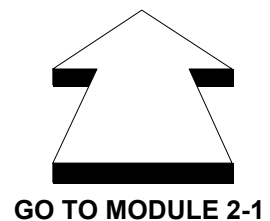
- a statutory or regulatory change causes materials already being managed to be redesignated as hazardous waste for the first time, or
- new activities planned for the site (e.g., storage of hazardous waste longer than 90 days, a new production operation, etc.) will involve hazardous waste management [40 CFR 270.1(b)].

In either case, the Part A application, or a modified Part A application, must be filed within the appropriate time frame.

***See Module 1-1 for a discussion of when to file a Part A application for an interim status facility.***



***See Module 2-1 for information on permit application deadlines for new facilities.***



When to Amend a  
Part A

Any DOE site that has already filed a Part A application when one of the two events mentioned above occurs may

simply amend the previous filing to incorporate new wastes or activities, if appropriate. (See the Introduction to this chapter for a list of practical items to consider when deciding whether to amend an existing RCRA permit application to include additional units or to file a separate application.) The cover letter accompanying the Part A application to the regulatory agency should indicate whether the Part A is an initial submission or an amendment.

Use EPA Form 8700-23 or  
State-Specific Equivalent

When preparing the Part A application, DOE site personnel should complete EPA Form 8700-23 or its state-specific equivalent in accordance with their accompanying instructions. For the




most part, such instructions are self-explanatory. Therefore, the balance of this module contains suggestions for completing only select items on the Part A application. The suggestions are either specific to DOE facilities or go beyond EPA's published instructions. If any of the suggestions listed here conflicts with instructions from a state regulatory agency, the instructions from the state agency should be followed, or DOE site personnel should seek further clarification.

- Standard Industrial Classification (SIC) Codes (See Item IX on EPA Form 8700-23 in Appendix I)

Choose an SIC Code

There are no SIC codes specific to DOE operations. The SIC system assigns an industry code to each operating establishment based on its principal product or group of products produced or distributed, or services rendered. All establishments primarily engaged in the same kind of economic activity are classified in the same four-digit industry, regardless of ownership.

Typical SIC codes for some DOE establishments include:

- 2819, Manufacturing of Industrial Organic Chemicals, Not Elsewhere Classified (this SIC code includes nuclear cores, inorganic; nuclear fuel reactor cores, inorganic; and nuclear fuel scrap reprocessing); 
- 3483, Manufacturing of Ammunition, Except for Small Arms (this SIC code includes bombs and parts);
- 8733, Noncommercial Research Organizations (this SIC code includes noncommercial physical and scientific research); and
- 1311, Crude Petroleum and Natural Gas (this SIC code includes the operation of oil and gas field properties).

Use the Standard Industrial Classification Manual or Consult Your Regulatory Agency

DOE site personnel should consult the latest edition of the Standard Industrial Classification Manual, published by the Executive Office of the President, Office of Management and Budget for additional information. The manual is available in most large public libraries and can purchased from:

National Technical Information Service  
5285 Port Royal Road  
Springfield, Virginia 22161

Order no. PB 87-100012

Questions about which SIC code to use may also be directed to EPA Regional Offices and state hazardous waste agencies.

There is currently no SIC code specific to the performance of environmental services (although SIC code 8711 covers providing professional engineering services). Site personnel at DOE sites where environmental restoration is the primary

activity should contact their regulatory agency for guidance about which SIC code to use.

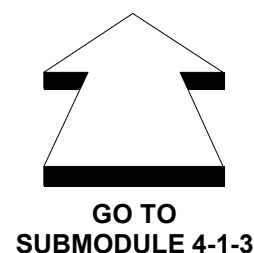
- Process Codes and Design Capacities (Item XII on EPA Form 8700-23 in Appendix I)

Include All Processes and  
Units and Maximum Design  
Capacity

The process codes and design capacities field requires entries for different types of disposal, storage, and treatment processes and the design capacities and number of units corresponding to each process. In this field, it is generally better to include all of the types of processes, the maximum design capacity, and the maximum number of units corresponding to each process that could be constructed at the facility. Failure to include a process that is later added to the facility, or a significant underestimate of capacity or number of units would require amending the permit application. If a permit has already been issued, adding processes, significant capacity, or units could require a Class 3 permit modification [40 CFR 270.42(c)].

***See Submodule 4-1-3 for information on Class 3 permit modifications.***

Be sure that all process units that should be covered by the permit are included in the application. Regulators have questioned permit applications for treatment and/or disposal process units that did not also include ancillary units for storage before treatment, or that did not appear to include storage units of sufficient capacity, given the capacity of the treatment or disposal unit.



- Description of Hazardous Wastes (Item XIV on EPA Form 8700-23 in Appendix I)

The description of hazardous wastes requires a listing of EPA hazardous waste code numbers (i.e., waste codes from 40 CFR 261, subparts C and D), the estimated annual quantity of waste for each

Include All Possible  
Hazardous Waste Numbers

code, and listing of the processes that will be used to treat store or dispose of each waste.

DOE sites should identify on the Part A application hazardous waste numbers for all waste streams expected to be managed by the facility for which the permit is sought. However, if wastes could conceivably be managed at a unit, but might not be, DOE personnel responsible for RCRA permitting should decide to include them, or not, based on such factors as whether state permitting fees are levied based on the type and amount of wastes the unit will manage. Addition of waste streams or hazardous waste numbers at a later time could require amending the permit application or modifying the permit (if a permit has already been issued).

Many of DOE's waste streams carry numerous hazardous waste code numbers. Each hazardous waste code number should be listed on a separate line in column A of Section XIV on EPA Form 8700-23. The estimated annual quantity of waste to be handled (column B), the unit of measure (column C), and the process codes [column D(1)] should be entered only with the first hazardous waste number for the waste stream. In column D(2), the phrase "included with the above amount" (or a similar phrase) should be entered on every line where there is no separate annual quantity, unit of measure, or process codes corresponding to a waste number.

- Photographs (Item XVII on EPA Form 8700-23 in Appendix I)

Color Photographs May More  
Clearly Delineate Site  
Characteristics

Although the Form 8700-23 instructions state that photographs may be either color or black and white, black and white photographs (and photocopies of these photographs) may not always meet the requirement stated under Item XVII that photographs "clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas." Therefore, DOE site personnel

may want to plan on including color photographs and color photocopies in the RCRA Part A permit application.

- Certifications (Item XVIII on EPA Form 8700-23 in Appendix I)

DOE Signs as Owner

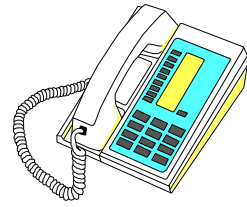
DOE and Operating  
Contractor Sign as Operator

Explanatory Statement for  
Regulatory Authorities

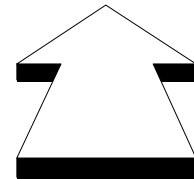
DOE's policy, expressed in SEN-22-90 (DOE Policy on Signatures of RCRA Permit Applications, 5/8/90), is "to have the duly authorized representatives of the Operations Offices sign RCRA permit applications as the owner and to sign jointly as the operator with the contractors who are responsible or partially responsible for hazardous waste activities at the facility." SEN-22-90 also recommends that the following statement accompany dual signatures, either in the permit application or in the transmittal letter, to encourage regulatory authorities to recognize the sharing of operating responsibilities.

The Department of Energy and its operating contractor, \_\_\_\_\_, have jointly signed this application as the operator of the permitted facility. The Department has determined that dual signatures best reflect the actual apportionment of responsibility under which the Department's RCRA responsibilities are for policy, programmatic, funding and scheduling decisions, as well as general oversight, and the contractor's RCRA responsibilities are for day-to-day operations, including but not limited to, the following responsibilities: waste analyses and handling, monitoring, record keeping, reporting, and contingency planning. For purposes of the certification required by 40 CFR Section 270.11(d), the Department's and \_\_\_\_\_'s representatives certify, to the best of their knowledge and belief, the truth accuracy and completeness of the application for their respective areas of responsibility.

Before assembling Part B permit applications, DOE permit application managers should meet with the permitting authority to discuss the permitting approach, contents, and format of the permit application.



***For additional information about developing the permitting approach, see Chapter 3, Managing RCRA Permitting.***



Use a Table of Contents

The application should have a detailed Table of Contents that identifies the volume and section where each required permit application item is located. Large permit applications are commonly submitted in looseleaf binders. For ease of review, it is recommended that each section of the permit application be separated by numbered or lettered tabs identified in the Table of Contents.

**GO TO CHAPTER 3**

Resubmit the Part A  
if it was Submitted Earlier

The Part A permit application usually comprises the first section of the permit application. If the Part A was submitted much earlier (i.e., for existing facilities), include a copy of the most recent Part A application.

A typical organization for a Part B permit application follows below. The organization of this submodule follows the organization of this typical Part B permit application, except that information about completing the Part A permit application was already presented in Submodule 2-2-1.

- Tab A      Part A Permit Application (see Submodule 2-2-1)
- Tab B      Facility Description (see Submodule 2-2-2-1)
  - General Description
  - Topographic Map
  - Wind Rose Diagram
  - Facility Location
  - Traffic Information



- Tab C      Waste Characterization (see Submodule 2-2-2-2)
- Tab D      Process Information (see Submodule 2-2-2-3)
  - Containers
  - Tanks
  - Surface Impoundments
  - Landfills
  - Incinerators
  - Boilers and Industrial Furnaces
  - Miscellaneous Units
  - Containment Buildings
  - Emission Controls for Process Vents
  - Emission Controls for Equipment Leaks
  - Emission Controls for Tanks, Surface Impoundments and Containers
- Tab E      Groundwater Monitoring (see Submodule 2-2-2-4)
- Tab F      Procedures to Prevent Hazards (see Submodule 2-2-2-5)
  - Security
  - Inspection Schedule
  - Preparedness and Prevention
  - General Hazard Prevention
  - Prevention of Reaction of Ignitable, Reactive and Incompatible Wastes
- Tab G      Contingency Plan (see Submodule 2-2-2-6)
- Tab H      Personnel Training (see Submodule 2-2-2-7)
- Tab I      Closure and Post-Closure Plans (see Submodule 2-2-2-8)
  - Closure Plans
  - Post-Closure Plans

- Tab J      Corrective Action for Solid Waste Management Units (see Submodule 2-2-2-9)
- Tab K      Public Participation (see Submodule 2-2-2-10 and Chapter 3)
- Tab L      Part B Certification (see Submodule 2-2-2-11)
- Tab M      Other Federal Laws (see Chapters 3 and 7)

Use the Exhibits to Organize Sections of the Permit Application

Each submodule below contains a series of exhibits that can be used to organize sections or subsections of the Part B permit application. These exhibits were developed based on Federal RCRA requirements in 40 CFR 264 (Standards for owners and operators of hazardous waste treatment, storage, and disposal facilities), 40 CFR 270 (EPA administered permit programs: The Hazardous Waste Permit Program), and permit application checklists published by EPA Headquarters and EPA Region IX. Each exhibit identifies required information items and provides specific regulatory citations.

In compiling information to fulfil the RCRA permit application requirements, it is important to remember that EPA developed the permit application requirements in 40 CFR 270 subsequent to the promulgation of the 40 CFR 265 interim status and the 40 CFR 264 permitted status requirements. In the 40 CFR 270 standards, EPA summarized or listed the information items that the permit writer would need to determine if interim status and new facilities would be able to meet the 40 CFR 264 permitted status standards.

Most 40 CFR 270 Information Requirements Have a Corresponding Technical Standard in 40 CFR 264

For DOE permit application managers, this means that the 40 CFR 264 standards (or their state equivalents) corresponding to the 40 CFR 270 permit application requirements are useful sources for compiling information to fulfill 40 CFR 270 information requirements. Knowing the basis for the 40 CFR 270 requirements is requisite to determining if the information being compiled is adequate to evaluate the permit application.

The facility description section of the Part B permit application usually consists of the following subsections:

- General Description
- Topographic Map
- Wind Rose Diagram
- Facility Location
- Traffic Information

The contents of these subsections are described below.

- General Description

Exhibit 2-2 presents suggested information for the general facility description required by 40 CFR 270.14(b)(1).

The General Description  
Should Carefully Identify  
the Facility/Unit Covered by  
the Application

Unlike most of the 40 CFR 270 permit application requirements, the general facility description requirement does not have corresponding technical requirements in 40 CFR 264. The goal of the general facility description is to place the balance of the information contained in the Part B permit application in the proper context for the permit writer. Thus, the facility description should carefully identify the specific facility, parts of the facility, building(s), or unit(s) at the DOE site covered by the Part B permit application.

**EXHIBIT 2-2**  
**SUGGESTED INFORMATION FOR THE**  
**GENERAL FACILITY DESCRIPTION [40 CFR 270.14(b)(1)]\***

- Applicability of RCRA permitting
- Processes that generate the wastes
- Location, size, and status (i.e., new or existing) of the facility and applicable units
- Name of the owner/operator
- History of the facility and of waste generating processes and activities
- Types of waste management activities currently conducted
- Types of waste management units
- Types of wastes that may be managed in the future
- General dimensions and structural description of the facility (or applicable units)

\* Adapted from EPA Checklists

In the general facility description, DOE permit application managers may want to identify other facilities, buildings, or units at the site already covered by other RCRA permits, or for which separate RCRA permit applications are being prepared. Similarly, DOE permit managers may want to differentiate those parts of the RCRA Part B permit application applicable to the RCRA activities at the site as a whole (e.g., personnel training, procedures to prevent hazards, contingency plan, security procedures and equipment), from parts applicable to the RCRA activities at the units/operations under consideration.

In preparing facility descriptions, DOE managers should provide overview information on the site's historic and current missions to the extent that this information elucidates:

- how wastes were generated;
- types of waste management activities conducted;
- types of waste treatment, storage, or disposal units proposed; and
- types and amounts of wastes that will be managed.

- Topographic Map

Topographic Map  
Information is Needed to  
Assess Risks

Exhibit 2-3 lists the topographic map requirements applicable to all facilities [40 CFR 270.14(b)] and to facilities where groundwater monitoring is required [40 CFR 270.14(c)]. (The applicability of groundwater monitoring is addressed in 40 CFR 264.90 and discussed in the groundwater monitoring section below.) The permit writer needs topographic map information to assess the risks posed by the entire facility and to put the groundwater monitoring and location information provided elsewhere in the permit application into context.

Contours Should Show the  
Pattern of Surface Water  
Flow

In addition to the information on the exhibit, the Federal regulations provide the following explanation of the requirement for the map to exhibit contours sufficient to show the pattern of surface water flow (see the third item on Exhibit 2-3).

- The map should contain contours with an interval of 1.5 meters (5 feet), if relief is greater than 6.1 meters (20 feet).
- The map should contain contours with an interval of 0.6 meters (2 feet), if relief is less than 6.1 meters (20 feet).
- For hazardous waste management facilities located in mountainous areas, large contour intervals should be used to adequately illustrate topographic profiles of facilities [40 CFR 270.14(b)(19)].

- Wind Rose Diagram

The Wind Rose Diagram Shows Prevailing Wind Speed and Direction

The requirement to provide a wind rose showing prevailing wind speed and direction [see 40 CFR 270.14(b)(19)(v)] is located in the topographic map requirements. However, most regulatory agencies prefer a wind rose diagram that is separate from the topographic map.

- Facility Location

All Facilities Must Meet Floodplain Standards

The Part B permit application must demonstrate that new facilities meet the seismic standards of 40 CFR 264.18(a) and that all facilities meet floodplain standards of 40 CFR 264.18(b). The seismic standards that must be met by new facilities, and the floodplain standards that must be met by all facilities are listed on Exhibit 2-4 [40 CFR 270.14(b)(11)].

New Facilities Must Meet Seismic Standards

Facilities not located in political jurisdictions, [i.e., counties, city-county consolidations, independent cities, election districts (Alaska), and islands (Hawaii)] included on the list in Appendix VI to 40 CFR 264 meet the seismic standard (see the second item on Exhibit 2-4). The Appendix VI list currently contains jurisdictions in 12 western States and the entire States of California and Nevada.

## EXHIBIT 2-3 TOPOGRAPHIC MAP REQUIREMENTS

Requirement	Citations
<u>All Facility Maps</u>	
• Show a distance of at least 1000 feet around the unit(s)	270.14(b)(19)
• Use a scale of no less than 1 inch equals 200 feet (1:2400)*	270.14(b)(19)
• Show a contour interval sufficient to show the pattern of surface water flow	270.14(b)(19)
• Show the 100-year floodplain area	270.14(b)(19)(ii)
• Show surface waters including intermittent streams	270.14(b)(19)(iii)
• Show surrounding land uses	270.14(b)(19)(iv)
• Show a wind rose (prevailing wind speed and direction)**	270.14(b)(19)(v)
• Show legal boundaries	270.14(b)(19)(vii)
• Show access control (fences, gates)	270.14(b)(19)(viii)
• Show location of injection and withdrawal wells (onsite and offsite)	270.14(b)(19)(ix)
• Show location of buildings and other structures	270.14(b)(19)(x)
• Show drainage and flood control barriers	270.14(b)(19)(xi)
• Show location of treatment unit(s) and decontamination areas	270.14(b)(19)(xii)
• Identify scale, date, and orientation of maps	270.14(b)(19)(i) and (vi)
<u>Maps for Facilities Where Groundwater Monitoring is Required</u>	
• Identify uppermost aquifer and hydraulically connected aquifers beneath the facility boundary, including groundwater flow direction and rate	270.14(c)(2)
• Delineate waste management areas and property boundaries	270.14(c)(3)
• Delineate point of compliance location	270.14(c)(3) and 264.95
• Delineate location of groundwater monitoring wells	270.14(c)(3) and 264.97
• Delineate extent of any groundwater contamination plume and identify the concentration of hazardous constituents throughout the plume	270.14(c)(4)(i) and (ii)

\* The regulations specify that EPA will allow the use of other scales on a case-by-case basis. The use of other scales is generally approved only for very large areas.

\*\* This requirement is generally met by providing a separate wind rose diagram.

Additional Information is  
Needed for Facilities  
Located in a 100-Year  
Floodplain

As shown on Exhibit 2-4, information about flood protection devices and procedures to move waste to safety in case of flooding must be provided for facilities located in a 100-year floodplain. Part B permit applications for facilities located in 100-year floodplains that are not designed, constructed, operated and maintained to prevent washout of hazardous waste by a 100-year flood, must also contain a plan for showing how the facility will be brought into compliance as well as a compliance schedule [40 CFR 270.14(b)(11)(v)].

FEMA Can Provide  
Floodplain Maps

The National Flood Insurance Program, administered by the Federal Emergency Management Administration (FEMA), may be able to provide 100-year floodplain maps for some DOE facilities. For national security reasons, FEMA maps may not be available for DOE facilities involved in nuclear or conventional weapons research, production, or testing. To order maps from the National Flood Insurance Program, write to the Map Service Center, 6730(A-G) Santa Barbara Court, Baltimore, Maryland 21227-5623, or call 1-800-358-9616.

Other Location Restrictions

Besides restrictions on facility location relating to seismic and floodplain standards, RCRA places restrictions on the use of salt dome formations, salt bed formations, and underground mines or caves for hazardous waste storage and disposal.

- The placement of hazardous waste in salt dome formations, salt bed formations, or underground mines or caves is prohibited at RCRA interim status facilities (40 CFR 265.18).
- The placement of noncontainerized or bulk liquid hazardous waste in salt dome formations, salt bed formations, or underground mines or caves is prohibited at permitted RCRA facilities [40 CFR 264.18(c)].

Exemption for WIPP

Section 3004(b) of RCRA, however, specifically exempts DOE's Waste Isolation Pilot Plant from these location restrictions. This exemption is codified at 40 CFR 265.18 and 40 CFR 264.18(c).





## EXHIBIT 2-4 FACILITY LOCATION INFORMATION

Requirement	Citations
<p style="text-align: center;"><u>Seismic Standards -- Applicable to New Facilities Only</u></p> <ul style="list-style-type: none"> <li>● Identify the political jurisdiction in which the facility will be located</li> <li>● For facilities in political jurisdictions listed in Appendix VI of 40 CFR 264 <ul style="list-style-type: none"> <li>- Provide information showing that no faults which have had displacement in Holocene time (the last 11,000 years) are present within 900 meters (3,000 feet) of the facility, or</li> <li>- Provide information showing that no faults that have had displacement in Holocene time pass within 61 meters (200 feet) of the portions of the facility where waste treatment, storage or disposal will be conducted</li> </ul> </li> </ul> <p style="text-align: center;"><u>Floodplain Standards</u></p> <ul style="list-style-type: none"> <li>● All facilities <ul style="list-style-type: none"> <li>- Identify whether the facility is located within a 100-year floodplain,</li> <li>- Identify the source of the data used to make the determination,</li> <li>- Identify the 100-year flood level, and</li> <li>- Identify other special flooding factors (e.g., wave action) that must be considered in designing, operating, or maintaining the facility to withstand washout from a 100-year flood</li> </ul> </li> <li>● Facilities located in a 100-year floodplain <ul style="list-style-type: none"> <li>- Provide an engineering analysis indicating the hydrodynamic and hydrostatic forces expected to result from a 100-year flood, and structural or engineering studies showing how the design of operational units and flood protection devices will prevent washout, or</li> <li>- Provide a detailed description of the procedures to be followed to remove waste to safety before the facility is flooded including <ul style="list-style-type: none"> <li>-- The timing of such movement relative to flood levels,</li> <li>-- A description of the locations(s) to which the waste will be moved and demonstration that those facilities will be eligible to receive waste in accordance with applicable regulations,</li> <li>-- Planned procedures, equipment, and personnel to be used and the means to ensure that such resources will be available in time for use, and</li> <li>-- The potential for accidental discharges of waste during movement.</li> </ul> </li> </ul> </li> <li>● Existing facilities not in compliance with §264.18(b) <ul style="list-style-type: none"> <li>- Provide a plan showing how the facility will be brought into compliance and a schedule for compliance.</li> </ul> </li> </ul>	<p>270.14(b)(11)(i) and 264.18(a)</p> <p>270.14(b)(11)(ii)</p> <p>270.14(b)(11)(ii)(A)</p> <p>270.14(b)(11)(ii)(B)</p> <p>270.14(b)(11)(iii)</p> <p>270.14(b)(11)(iv)(A) and (B)</p> <p>270.14(b)(11)(iv)(C)(1)</p> <p>270.14(b)(11)(iv)(C)(2)</p> <p>270.14(b)(11)(iv)(C)(3)</p> <p>270.14(b)(11)(iv)(C)(4)</p> <p>270.14(b)(11)(v)</p>

In addition to addressing the RCRA requirements described above, DOE permit application managers may want to include a discussion in the Part B permit application that describes the influence that the requirements imposed by the authorities listed below have had on selecting the proposed facility location:

- DOE Order 5820.2A, Radioactive Waste Management;
- 10 CFR 960 (which is applicable to the siting of high-level waste repositories); and
- the National Environmental Policy Act.

- Traffic Information

Exhibit 2-5 lists traffic information required in the Part B permit application [40 CFR 270.14(b)(10)]. For large DOE facilities where all roads could be used to transport waste to different waste treatment, storage, or disposal units, it is generally acceptable to state this in the permit application in place of tracing every possible traffic route.

Use Traffic Information  
From EISs

The environmental assessments or environmental impact statements prepared by DOE facilities to comply with NEPA requirements may contain some of the information needed (e.g., road surface and load bearing capacity) to comply with traffic information requirements.

Waste Analysis Plan Goes  
in the Waste  
Characterization Section

The Part B permit application must include chemical and physical information about the hazardous waste and debris to be handled at the facility. At a minimum, this information must contain all of the information necessary to treat, store, and dispose of wastes properly in accordance with 40 CFR 264 and 40 CFR 268 (Land Disposal Restrictions) requirements [40 CFR 270.14(b)(2)]. The application must also include a copy of the Waste Analysis Plan prepared in accordance with 40 CFR 264.13(b) for all facilities, and 40 CFR 264.13(c) for off-site facilities [40 CFR 270.14(b)(3)]. Off-site facilities are defined as facilities that receive and manage hazardous waste from another facility that is not geographically on site (see “Waste Analysis at Facilities that Generate, Treat, Store, and Dispose of Hazardous Waste,” OSWER Document No. 9938.4-03, April 1994, page F-2).

**EXHIBIT 2-5**  
**TRAFFIC INFORMATION [40 CFR 270.14(b)(10)]**

- Traffic patterns
- Estimated numbers and types of vehicles
- Traffic control measures (signs, persons, lights, signals, etc.)
- Information about waste transfer or pick-up stations (if applicable)\*
- Quantity of waste moved per movement per vehicle (if applicable)\*
- Road surface and load-bearing capacity of roads within facility boundaries
- Road surface and load-bearing capacity of access roads\*

\* Based on EPA Checklists

Waste analysis plan information requirements are summarized on Exhibit 2-6. In preparing waste analysis plans, DOE permit application managers should use EPA's waste analysis plan guidance document, referenced above. This document is available from the National Technical Information Service.

Include Copies of LDR Extensions, Petitions, and Variances

Copies of notices granting a LDR case-by-case extensions, no migration petitions, and variances from treatment standards must be included somewhere in the Part B permit application [40 CFR 270.14(b)(21)]. These notices can be included in the Waste Analysis Plan. If they are not included in the plan, they should be referenced to preclude confusion relating to applicable LDR standards.

Mixed Waste Sampling and Analysis May Require Deviations from Standard RCRA Methods

Sampling and analyzing mixed waste may involve changes to or deviations from established RCRA sampling and analysis methods. Such changes or deviations may include: using smaller sample sizes, having longer holding times, or using different analysis methods or procedures. Sampling and analysis plans for mixed waste should identify when such changes or deviations may be necessary and explain the reasons for the changes or deviations. Possible reasons include:



- to meet ALARA goals,
- to operate more effectively under the conditions imposed by remote-handling systems (extensive manipulation of heavy or bulky objects is difficult in gloveboxes and hot cells), and
- to improve the accuracy of the results when radioactive materials in the waste (e.g., plutonium) could cause interference.

EPA/NRC Guidance Recognizes that DOE Must Meet ALARA Goals

EPA and NRC have issued a draft guidance document addressing mixed waste testing (“Clarification of RCRA Testing Requirements for Mixed Waste, Draft Guidance,” March 1992). This document indicates that EPA is sensitive to DOE's need to meet ALARA goals and recognizes the benefit of using process knowledge techniques, including the testing of surrogate wastes, in waste characterization processes.



**EXHIBIT 2-6**  
**WASTE ANALYSIS PLAN INFORMATION REQUIREMENTS\***

Requirement	Citation
<p style="text-align: center;"><u>All Facilities</u></p> <ul style="list-style-type: none"> <li>● Parameters for which wastes will be analyzed/rationale for the selection of these parameters</li> <li>● Test method for each parameter</li> <li>● Method of obtaining a representative sample</li> <li>● Frequency with which initial analyses will be reviewed or repeated</li> <li>● Additional waste analysis methods to demonstrate unit-specific compliance</li> <li>● Additional waste analyses to demonstrate compliance with requirements for safe management of ignitable, reactive, or incompatible waste</li> </ul>	<p>264.13(b)(1)</p> <p>264.13(b)(2)</p> <p>264.13(b)(3)</p> <p>264.13(b)(4)</p> <p>264.13(b)(6)</p> <p>264.17(c)</p>
<p style="text-align: center;"><u>Off-Site Facilities</u></p> <ul style="list-style-type: none"> <li>● Waste analyses that hazardous waste generators have agreed to supply</li> <li>● Procedures to inspect and, if necessary, analyze each movement of hazardous waste received at the facility to ensure that it matches the identity of the waste designated on the accompanying manifest or shipping paper <ul style="list-style-type: none"> <li>- Procedures to determine the identity of each movement of waste managed at the facility</li> <li>- Sampling method to obtain a representative sample of the waste to be identified (if the identification method includes sampling)</li> <li>- For off-site landfills receiving containerized hazardous waste, procedures to determine if a biodegradable sorbent has been added to the waste</li> </ul> </li> </ul>	<p>264.13(b)(5)</p> <p>264.13(c)</p> <p>264.13(c)(1)</p> <p>264.13(c)(2)</p> <p>264.13(c)(3)</p>

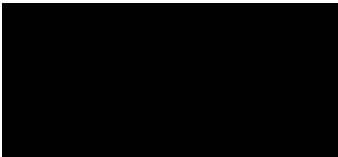
\* See the discussion in Submodule 2-2-2-2 for information and references to guidance materials specifically addressing mixed waste sampling and analysis.

For example, the document states,

Mixed waste is unique for its radioactive/hazardous composition and dual management needs. Each sampling event involving mixed waste may result in an incremental exposure to radiation, and EPA's responsibility to protect human health and the environment must show due regard for minimizing this unique exposure risk (p.15).

DOE permit application managers may find this document and the following DOE documents to be useful in preparing sampling and analysis plans for mixed waste:

- *Preparation of RCRA Waste Analysis Plans (Interim Guidance)*, DOE/EH-0306 (March 1993).
- *DOE Methods for Evaluating Environmental and Waste Management Samples*, DOE/EM-0089T, Rev. 2, Addendum 1.



Appropriate process information must be included in the Part B permit application for each hazardous waste management unit covered by the application. This information is summarized below for each type of hazardous waste management unit owned by DOE.

- Containers

The information requirements for containers and container storage areas in the Part B permit application vary according to the hazards posed by the wastes in the containers, as shown on Exhibit 2-7. The exhibit also shows how the permit application information requirements for container storage areas are designed to address container storage standards in 40 CFR 264.175, 40 CFR 264.176, and 40 CFR 264.177.

Containers With Free Liquids

- Container storage areas with containers that could contain free liquids, or that contain EPA waste codes F020, F021, F022, F023, F026, or F027, must have a containment system [40 CFR 264.175(a)]. Information provided about containers

in the Part B permit application should demonstrate that, if containers could contain free liquids or one of the specified waste codes, the containers are kept in an area with a containment system and the containment system and containers meet the requirements of 40 CFR 264.175(b).

Free liquids are defined as liquids which readily separate from the solid portion of a waste under ambient temperature and pressure (40 CFR 260.10). The Paint Filter Liquids Test can be used to determine if a waste contains free liquids. (The Paint Filter Liquids Test is included in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, EPA Publication SW-846, available from the National Technical Information Service.)

Containers That Do Not  
Contain Free Liquids

- Information provided about container storage areas with containers that do/could not contain free liquids must demonstrate that container storage areas meet the requirements of 40 CFR 264.175(c), which are less stringent than the 40 CFR 264.175(b) requirements.

Containers Holding  
Ignitable or Reactive Waste

- Information provided about containers holding ignitable or reactive waste must demonstrate that the containers meet the requirements of 40 CFR 264.176.

Incompatible Wastes

- Information provided about container storage areas where incompatible wastes could be stored must demonstrate compliance with special requirements for incompatible wastes in 40 CFR 264.177.

**EXHIBIT 2-7**  
**INFORMATION REQUIREMENTS FOR CONTAINER STORAGE AREAS**

Type of Container Storage Area	Information Requirement/ Citation	Reason for Requirement/ Citation
<p>Container Storage Area Where Containers Could Contain Free Liquids or Wastes With Hazard Code F020, F021, F022, F023, F026, or F027</p>	<p>Description of the containment system including at least the items listed below/270.15(a)</p> <ul style="list-style-type: none"> <li>• Describe basic design parameters, dimensions, and materials of construction/270.15(a)(1)</li> <li>• Demonstrate how the design promotes drainage or how containers are kept from contact with standing liquids in the containment system/270.15(a)(2)</li> <li>• Provide the capacity of the containment system relative to the number and volume of containers stored/270.15(a)(3)</li> <li>• Describe provisions for preventing or managing run-on/270.15(a)(4)</li> <li>• Describe how accumulated liquids can be analyzed and removed to prevent overflow/270.15(a)(5)</li> </ul>	<p>Demonstrate compliance with design and operating requirements for container storage areas where container could contain free liquids or wastes with specified F Codes/264.175(b)</p> <p>A base must underlie the containers which is free of cracks or gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation/264.175(b)(1)</p> <p>The base must be sloped or the containment system must be otherwise designed and operated to drain and remove liquids, unless the containers are elevated or otherwise protected/264.175(b)(2)</p> <p>The containment system must have sufficient capacity to contain 10% of the volume of containers or the volume of the largest container, whichever is greater/264.175(b)(3)</p> <p>Run-on into the containment system must be prevented unless the collection system has sufficient excess capacity/264.175(b)(4)</p> <p>Spilled or leaked waste and accumulated precipitation must be removed from the sump or collection area in as timely a manner as is necessary to prevent overflow of the collection system/264.175(b)(5)</p>



**EXHIBIT 2-7**  
**INFORMATION REQUIREMENTS FOR CONTAINER STORAGE AREAS**

Type of Container Storage Area	Information Requirement/ Citation	Reason for Requirement/ Citation
Container Storage Area Where Containers Do Not Contain Free Liquids or Waste With Hazard Code F020, F021, F022, F023, F026 or F027	<ul style="list-style-type: none"> <li>Describe test procedures and results or other documentation or information to show that wastes do not contain free liquids/270.15(b)(1)</li> <li>Describe how the storage area is designed or operated to drain and remove liquids or how containers are kept from contact with standing liquids/270.15(b)(2)</li> </ul>	<p>Justifies not having to meet requirements for container storage areas where containers could contain free liquids or the specified F waste codes/264.175(c)</p> <p>The storage area must be sloped or otherwise designed and operated to drain and remove liquid resulting from precipitation or the container must be elevated or otherwise protected from accumulated liquid/264.175(c)(1) and (2)</p>
Container Storage Area Where Containers Could Hold Reactive or Ignitable Waste	Provide sketches, drawings, or data demonstrating compliance with 40 CFR 264.176 Requirements/270.15(c)	Containers holding ignitable or reactive waste must be located at least 15 meters (50 feet) from the facility's property line/264.176
Container Storage Area Where Containers Could Hold Incompatible Wastes	Description of procedures to ensure compliance with incompatible waste requirements/270.15(d)	<p>Incompatible wastes or incompatible wastes and materials must not be placed in the same container, unless precautions of 40 CFR 264.17(b) are taken/264.177(a)</p> <p>Owners/operators of facilities that treat, store, or dispose of incompatible waste must take certain precautions to prevent certain reactions and document these precautions/264.17(b) and (c)</p>
All Container Storage Areas	Provide information on air emission control equipment/270.15(e) and 270.27*	Hazardous wastes placed in containers must be managed in accordance with air emission control standards for containers /264.179

\* See Exhibit 2-18 for additional information requirements.

- Tanks

Exhibit 2-8 lists Part B permit application information requirements for different types of tanks. As shown on the exhibit, certain basic information is required for all tanks and tank systems, but there are additional information requirements for tank systems that:

- are existing and have secondary containment,
- are new,
- are seeking a variance from secondary containment, or
- pose hazards that require special precautions (40 CFR 270.16).

The exhibit also links the Part B permit application information requirements for tanks to citations for corresponding tank standards in 40 CFR 264.191 through 264.193, 264.198, 264.199 and 264.200.

Besides the information requirements listed on Exhibit 2-8, the RCRA Part B permit application regulations contain information requirements specific to tank inspections [40 CFR 270.14(b)(5)] and contingency plans [40 CFR 270.14(b)(7)]. These requirements are listed in Submodules 2-2-2-5 and 2-2-2-6 below. DOE permit application managers may include information to address these requirements in the section of the permit application applicable to tanks, or in the sections applicable to inspections and contingency plans. To assist the permit writer, the location of this information should be referenced in the section(s) where it is not included.

**EXHIBIT 2-8**  
**INFORMATION REQUIREMENTS FOR TANK SYSTEMS**

<b>Type of Tank System</b>	<b>Requirements*</b>	<b>Citations</b>
All Tank Systems	<ul style="list-style-type: none"> <li>● Provide a written assessment reviewed and certified by an independent, qualified, registered, professional engineer as to the structural integrity and suitability for handling hazardous waste of: <ul style="list-style-type: none"> <li>- Existing tank systems without secondary containment; and</li> <li>- New tank systems and existing tank systems that have secondary containment as required by 40 CFR 264.193</li> </ul> </li> <li>● Provide dimensions and capacity of each tank</li> <li>● Provide a description of feed systems, safety cutoff, bypass systems, and pressure controls (e.g., vents)</li> <li>● Provide a diagram of piping, instrumentation, and process flow for each tank system</li> <li>● Provide a description of controls and practices to prevent spills and overflows</li> <li>● Provide information on air emission control equipment**</li> </ul>	<p>270.16(a) and</p> <p>264.191</p> <p>264.192(a)</p> <p>270.16(b)</p> <p>270.16(c)</p> <p>270.16(d)</p> <p>270.16(i) and 264.194(b)</p> <p>270.16(k), 270.27, and 264.200</p>
New Tank Systems	<p>Provide a detailed description of how the tank system(s) will be installed</p> <ul style="list-style-type: none"> <li>● Inspection</li> <li>● Backfill material</li> <li>● Tightness testing</li> <li>● Support and protection of ancillary equipment</li> </ul>	<p>270.16(f) and</p> <p>264.192(b)</p> <p>264.192(c)</p> <p>264.192(d)</p> <p>264.192(e)</p>

**EXHIBIT 2-8**  
**INFORMATION REQUIREMENTS FOR TANK SYSTEMS**

<b>Type of Tank System</b>	<b>Requirements*</b>	<b>Citations</b>
New Tank Systems and Existing Tank Systems with Secondary Containment	<ul style="list-style-type: none"> <li>● Provide a description of materials and equipment used to provide external corrosion protection</li>   <li>● Provide detailed plans and description of how the secondary containment system is or will be designed, constructed, and operated to meet applicable requirements <ul style="list-style-type: none"> <li>– Applicability</li> <li>– Design, operation, and installation</li> <li>– Construction, placement, leak detections, drainage</li> <li>– Containment devices</li> <li>– Specifications</li> <li>– Ancillary equipment</li> </ul> </li> </ul>	270.16(e), 264.192(a)(3) and 264.192(f)  270.16(g) and  264.193(a) 264.193(b) 264.193(c) 264.193(d) 264.193(e) 264.193(f)
Tank Systems For Which a Variance From Secondary Containment is Sought	Provide detailed plans and engineering and hydrogeologic reports describing alternate design and operating practices that will prevent the migration of any hazardous waste  OR Detailed assessment of the hazards posed to human health or the environment if a release enters the environment	270.16(h)(1) and 264.193(g)  270.16(h)(2) and 264.193(g)

**EXHIBIT 2-8**  
**INFORMATION REQUIREMENTS FOR TANK SYSTEMS**

<b>Type of Tank System</b>	<b>Requirements*</b>	<b>Citations</b>
Tank Systems in Which Ignitable Reactive, or Incompatible Wastes Will Be Stored or Treated	<p>Describe how operating procedures, tank systems, and facility design will achieve compliance with applicable requirements for:</p> <ul style="list-style-type: none"> <li>● Ignitable or reactive wastes</li> <li>● Incompatible wastes</li> </ul>	<p>270.16(j) and</p> <p>264.198</p> <p>264.199</p>

\* See Exhibit 2-25 for contingency plan information requirements applicable to tanks and Exhibit 2-21 for inspection requirements applicable to tanks.

\*\* See Exhibit 2-18 for additional information requirements.

EPA published a guidance manual entitled *Technical Resource Document for the Storage and Treatment of Hazardous Wastes in Tank Systems* in December 1986 (OSWER Policy Directive No. 9483.00-1, EPA/530-SW-86-044). It is available from the National Technical Information Service (PB-87134391). Although dated with regard to the design of tank systems and applicable industry codes, it provides valuable insight into how EPA interprets the specific regulatory citations in 40 CFR 270 and 40 CFR 264 applicable to tank systems.

- Surface Impoundments

Exhibit 2-9 lists Part B permit application information requirements for different types of surface impoundments. As shown on the exhibit, the information requirements in the Part B permit application for surface impoundments vary according to whether:

- the surface impoundment units, expansions, or replacements are new or existing; and
- the hazards posed by the wastes to be treated/stored require special precautions.

The exhibit also links the Part B permit application information requirements for surface impoundments to corresponding surface impoundment standards by providing citations to 40 CFR 264.221 through 264.223, 264.226, and 264.229 through 264.232.

Besides the information requirements listed on Exhibit 2-9, the RCRA Part B permit application regulations contain information requirements specific to surface impoundment inspections [40 CFR 270.14(b)(5)], contingency plans [40 CFR 270.14(b)(7)], and closure and post-closure plans [40 CFR 270.14(b)(13)]. These requirements are discussed in Submodules 2-2-2-5, 2-2-2-6 and 2-2-2-8 below. DOE permit application managers may include information to address these requirements in the section of the permit application applicable to surface impoundments, or in the sections applicable to inspections, contingency plans, and closure and post-closure plans. To assist the permit writer, the location of this information should be referenced in the section(s) where it is not included.

**EXHIBIT 2-9**  
**INFORMATION REQUIREMENTS FOR SURFACE IMPOUNDMENTS**

Type of Surface Impoundment	Requirements*	Citations
All Surface Impoundments	<ul style="list-style-type: none"> <li>● Provide a list of the hazardous wastes placed or to be placed in each surface impoundment</li> <li>● Provide detailed plans and an engineering report describing how the surface impoundment is designed and is or will be constructed, operated and maintained to meet applicable requirements</li> <li>● Provide information to show how overtopping will be prevented</li> <li>● Provide information to demonstrate structural integrity of dikes</li> <li>● Provide information on air emission control equipment**</li> </ul>	<p>270.17(a)</p> <p>270.17(b)</p> <p>270.17(b)(6)</p> <p>270.17(b)(7)</p> <p>270.17(j), 270.27, and 264.232</p>
New Surface Impoundment Units, Lateral Expansions, or Replacements***	<ul style="list-style-type: none"> <li>● Provide information to demonstrate compliance with requirements for a construction quality assurance program including a construction quality assurance plan and certification</li> <li>● Provide information to demonstrate compliance with requirements for two or more liners, a leak detection system and a leachate collection and removal system between the liners</li> </ul> <p style="text-align: center;">OR</p> <p>For monofills only, provide information to justify a waiver from the double liner, leak detection system, and leachate collection and removal system requirement</p> <ul style="list-style-type: none"> <li>● If a leak detection system is located in a saturated zone, submit detailed plans and an engineering report explaining the leak detection system design and operation, and the location of the saturated zone in relation to the leak detection system</li> </ul>	<p>270.17(b), 270.17(b)(4) and 264.19(a) - (d)</p> <p>270.17(b)(2) and 264.221(c) or (d)</p> <p>270.17(b)(2) and 264.221(e)</p> <p>270.17(b)(3) and 264.221(c)(2) or (d)</p>

**EXHIBIT 2-9**  
**INFORMATION REQUIREMENTS FOR SURFACE IMPOUNDMENTS**

Type of Surface Impoundment	Requirements*	Citations
	<ul style="list-style-type: none"> <li>For units subject to 40 CFR 264.221(c) or (d), Provide the proposed action leakage rate for regulator approval</li> </ul>	270.17(b)(5) and 264.222
(Cont'd.)	<ul style="list-style-type: none"> <li>For units subject to 40 CFR 264.221(c) or (d), Provide a response action plan</li> <li>Provide a statement by a qualified engineer that a certification attesting to the structural integrity of each dike will be submitted upon completion of construction in accordance with plans and specifications</li> </ul>	<p>270.17(b)(5) and 264.223</p> <p>270.17(d) and 264.226(c)</p>
Existing Surface Impoundment Units, Lateral Expansions, or Replacements	<ul style="list-style-type: none"> <li>Demonstrate compliance with requirements applicable to liners OR Submit information to justify a variance from these requirements on the basis of alternate design and operating practices and location characteristics OR For replacement units constructed in compliance with the design standards of Sections 3004(o)(1)(A)(i) and (o)(5) of RCRA, submit information justifying an exemption</li> <li>Provide a certification by a qualified engineer attesting to the structural integrity of each dike</li> </ul>	<p>270.17(b)(1) and 264.221(a)(1) - (3)</p> <p>270.17(b)(1) and 264.221(b)</p> <p>270.17(b)(1) and 264.221(f)</p> <p>270.17(d) and 264.226(c)</p>
Surface Impoundments That May Contain Ignitable or Reactive Wastes	Describe methods of compliance with requirements applicable to ignitable or reactive wastes in surface impoundments	270.17(g) and 264.229



**EXHIBIT 2-9**  
**INFORMATION REQUIREMENTS FOR SURFACE IMPOUNDMENTS**

<b>Type of Surface Impoundment</b>	<b>Requirements*</b>	<b>Citations</b>
Surface Impoundments That May Contain Incompatible Wastes	Describe methods of compliance with requirements applicable to incompatible wastes	270.17(h) and 264.230
Surface Impoundments That May Contain EPA Hazardous Waste Nos. F020, F021, F022, F023, F026 and F027	Provide a waste management plan for these wastes	270.17(i) and 264.231

\* See Exhibit 2-25 for contingency plan information requirements applicable to surface impoundments, Exhibit 2-19 for inspection requirements applicable to surface impoundments, and Exhibit 2-27 for closure plan information requirements applicable to surface impoundments.

\*\* See Exhibit 2-18 for additional information requirements.

\*\*\* With regard to these requirements, new surface impoundment units, lateral expansions, and replacements are units, expansions, and replacements on which construction commenced after January 29, 1992.

- Landfills

Exhibit 2-10 lists Part B permit application information requirements for different types of landfills. As shown on the exhibit, the information requirements in the Part B permit application for landfills vary according to whether:

- the landfills or landfill cells are new or existing; and
- the hazards posed by the wastes to be disposed require special precautions.

The exhibit also links the Part B permit application information requirements for landfills to corresponding landfill standards by providing citations to 40 CFR 264.301, 264.302, 264.303, 264.312, 264.313, 264.315, 264.316, and 264.317.

Landfill Inspections and  
Closure and Post-Closure  
Plans

Besides the information requirements listed on Exhibit 2-10, the RCRA Part B permit application regulations contain information requirements specific to landfill inspections [40 CFR 270.14(b)(5)] and closure and post-closure plans [40 CFR 270.14(b)(13)]. These requirements will be listed in Submodules 2-2-2-5 and 2-2-2-8 below. DOE permit application managers may include information to address these requirements in the section of the permit application applicable to landfills, or in the sections applicable to inspections and closure and post-closure plans. To assist the permit writer, the location of this information should be referenced in the section(s) where it is not included.

**EXHIBIT 2-10**  
**INFORMATION REQUIREMENTS FOR LANDFILLS**

Type of Landfill/ Landfill Cell	Requirements*	Citations
All Landfills	<ul style="list-style-type: none"> <li>• Provide a list of the hazardous wastes placed or to be placed in each landfill or landfill cell</li> <li>• Provide detailed plans and an engineering report describing how the landfill is designed and is or will be constructed, operated and maintained to meet applicable requirements</li> <li>• Provide information describing control of run-on</li> <li>• Provide information describing control of run-off</li> <li>• Provide information describing management of collection and holding facilities associated with run-on and run-off control systems</li> <li>• Provide information describing control of wind dispersal of particulate matter, where applicable</li> </ul>	<p>270.21(a)</p> <p>270.21(b)</p> <p>270.21(b)(2)</p> <p>270.21(b)(3)</p> <p>270.21(b)(4)</p> <p>270.21(b)(5)</p>
New Landfills or Landfill Cells**	<ul style="list-style-type: none"> <li>• Provide information to demonstrate compliance with requirements for a construction quality assurance program including a construction quality assurance plan and certification</li> <li>• Provide information to demonstrate compliance with requirements for two or more liners, a leak detection system and a leachate collection and removal system between the liners OR For monofills only, provide information to justify a waiver from the double liner, leak detection system, and leachate collection and removal system requirement</li> <li>• If a leak detection system is located in a saturated zone, submit detailed plans and an engineering report explaining the leak detection system design and operation, and the location of the saturated zone in relation to the leak detection system</li> </ul>	<p>270.21(b), 270.21(b)(1)(iv), and 264.19(a) - (d)</p> <p>270.21(b)(1)(ii) and 264.301(c) or (d)</p> <p>270.21(b)(1)(ii) and 264.301(e)</p> <p>270.21(b)(1)(iii) and 264.301(c)(2) or (d)</p>

**EXHIBIT 2-10**  
**INFORMATION REQUIREMENTS FOR LANDFILLS**

Type of Landfill/ Landfill Cell	Requirements*	Citations
(Cont'd.)	<ul style="list-style-type: none"> <li>For units subject to 40 CFR 264.301(c) or (d), provide the proposed action leakage rate for regulator approval</li> <li>For units subject to 40 CFR 264.301(c) or (d), Provide a response action plan</li> </ul>	<p>270.21(b)(1)(v) and 264.302</p> <p>270.21(b)(1)(v) and 264.304</p>
Existing Landfills or Landfill Cells	<ul style="list-style-type: none"> <li>Demonstrate compliance with requirements applicable to liners OR</li> </ul> <p>Submit information to justify a variance from these requirements on the basis of alternate design and operating practices and location characteristics</p> <p>OR</p> <p>For units constructed in compliance with the design standards of Sections 3004(o)(1)(A)(i) and (o)(5) of RCRA, submit information justifying an exemption</p>	<p>270.21(b)(1) and 264.301(a)(1) - (2)</p> <p>270.21(b)(1) and 264.301(b)</p> <p>270.21(b)(1) and 264.301(f)</p>
Landfills or Landfill Cells That May Contain Ignitable or Reactive Wastes	Describe methods of compliance with requirements applicable to ignitable or reactive wastes in landfills	270.21(f) and 264.312
Landfills or Landfill Cells That May Contain Incompatible Wastes	Describe methods of compliance with requirements applicable to incompatible wastes	270.21(g) and 264.313
Landfills or Landfill Cells That May Accept Containers of Hazardous Waste	<ul style="list-style-type: none"> <li>Describe how requirements applicable to disposal of containers will be complied with</li> <li>Describe how requirements applicable to disposal of small containers in overpacked drums will be complied with</li> </ul>	<p>270.21(i) and 264.315</p> <p>270.21(i) and 264.316</p>

**EXHIBIT 2-10  
INFORMATION REQUIREMENTS FOR LANDFILLS**

<b>Type of Landfill/ Landfill Cell</b>	<b>Requirements*</b>	<b>Citations</b>
Landfills or Landfill Cells That May Contain EPA Hazardous Waste Nos. F020, F021, F022, F023, F026 and F027	Provide a waste management plan for these wastes	270.21(j) and 264.317

\* See Exhibit 2-21 for inspection requirements applicable to landfills and Exhibit 2-27 for closure plan information requirements applicable to landfills.

\*\* With regard to these requirements, new landfills or landfill cells are landfills or landfill cells on which construction commenced after January 29, 1992.

- Incinerators

Exhibits 2-11, 2-12, and 2-13 list permit application information requirements applicable to the permitting of incinerators.

Initial Permit Application  
for Incinerators

Exhibit 2-11 is applicable to new and existing incinerators. It lists the basic information needed by the permit writer to evaluate compliance with incinerator operating and design standards in 40 CFR 264.342 through 40 CFR 264.345. To provide this information, DOE permit application managers will almost always have to include detailed design plans, specifications, and maintenance and operating procedures in the permit application to demonstrate that the incinerator meets or will be able to meet all applicable standards. [See page IX(A)-14 of “Model RCRA Permit for Hazardous Waste Management Facilities (Draft),” U.S. Environmental Protection Agency, September 1988, PB90-210998.]

Incinerator Inspections,  
Contingency Plans, and  
Closure Plans

Besides the information requirements listed on Exhibit 2-11, the incinerator and permitting regulations require the permit application to contain information specific to incinerator monitoring and inspections [40 CFR 264.347 and 270.14(b)(5)], contingency plans [40 CFR 270.14(b)(7)], and closure plans [40 CFR 270.14(b)(13)]. These requirements are discussed in Submodules 2-2-2-5, 2-2-2-6 and 2-2-2-8 below. DOE permit application managers may include information to address these requirements in the section of the permit application applicable to incinerators, or in the sections applicable to inspections, contingency plans, and closure plans. To assist the permit writer, the location of this information should be referenced in the section(s) where it is not included.

Permitting of New  
Incinerators

Exhibit 2-12 is applicable to the permitting of new incinerators, which is a phased process beginning with an initial permit issued by the permitting authority based on an application containing the information outlined on Exhibit 2-11 and described above. The next phase in the process involves an operational readiness period followed by a trial burn. The results of the trial burn are used to develop the specific conditions under which the incinerator

**EXHIBIT 2-11**  
**INFORMATION REQUIREMENTS FOR INCINERATORS:**  
**INITIAL PERMIT APPLICATION**

<b>Type of Incinerator Unit</b>	<b>Information Requirement/Citation</b>
All Incinerator Units	<ul style="list-style-type: none"> <li>● Propose principal organic hazardous constituents to be monitored from among those listed in Appendix VIII to 40 CFR 261 (264.342)</li> <li>● Demonstrate that the incinerator will not emit particulate matter in excess of 180 milligrams per dry standard cubic meter (0.08 grains per dry standard cubic foot) when corrected for the amount of oxygen in the stack gas (264.343(c))</li> <li>● Describe the probable composition of the waste feed and the variation in the physical or chemical properties of the waste which will not affect compliance with applicable regulatory requirements (264.345(b))</li> <li>● For each waste feed, propose acceptable operating limits for <ul style="list-style-type: none"> <li>- carbon monoxide level in stack exhaust gas</li> <li>- waste feed rate</li> <li>- combustion temperature (264.345(b)(1)-(3))</li> </ul> </li> <li>● For each waste feed, propose <ul style="list-style-type: none"> <li>- an appropriate indicator of combustion gas velocity</li> <li>- allowable variations in incinerator system design or operating procedure</li> <li>- any other operating requirements necessary to meet applicable standards (264.345(b)(4)-(6))</li> </ul> </li> <li>● Describe how fugitive emissions from the combustion zone will be controlled (264.345(d))</li> <li>● Describe the automatic waste feed cutoff system (264.345(e))</li> </ul>
Incinerator Units Not Burning F020, F021, F022, F023, F026 or F027 Wastes	Demonstrate that the incinerator unit will achieve a 99.99% destruction removal efficiency for each principal organic hazardous constituent proposed (264.343(a)(1))

**EXHIBIT 2-11**  
**INFORMATION REQUIREMENTS FOR INCINERATORS:**  
**INITIAL PERMIT APPLICATION**

<b>Type of Incinerator Unit</b>	<b>Information Requirement/Citation</b>
Incinerator Units Not Burning F020, F021, F022, F023, F026 or F027 Wastes	Demonstrate that the incinerator unit will achieve a 99.99% destruction removal efficiency for each principal organic hazardous constituent proposed (264.343(a)(1))
Incinerator Units Burning F020, F021, F022, F023, F026 or F027 Wastes	Demonstrate that the incinerator unit will achieve a 99.9999% destruction removal efficiency for each principal organic hazardous constituent proposed (264.343(a)(2))
Incinerator Units Producing Stack Emissions of More Than 1.8 Kilograms Per Hour of Hydrogen Chloride	Demonstrate that hydrogen chloride emissions will be controlled such that the rate of emission will be no greater than the larger of either 1.8 kilograms per hour or 1% of the hydrogen chloride in the stack gas prior to entering any pollution control equipment (264.343(b))



**EXHIBIT 2-12**  
**INFORMATION REQUIREMENTS FOR DIFFERENT PHASES OF INCINERATOR OPERATION**

<b>Phase of Operation</b>	<b>Requirements</b>	<b>Citations</b>
Operational Readiness Following Completion of Physical Construction	Submit a statement: <ul style="list-style-type: none"> <li>• Suggesting the conditions necessary to operate the incinerator in compliance with performance standards for destruction removal efficiency, hydrogen chloride emissions, and particulate matter, and</li> <li>• Addressing operating requirements for restrictions on waste constituents, waste feed rates, and other operating parameters</li> </ul>	270.19(b), 270.62(a)(1), and 264.343  270.19(b), 270.62(a)(1), and 264.345
Before a Trial Burn Occurs	Submit a proposed trial burn plan including the following information: <ul style="list-style-type: none"> <li>• An analysis of each waste or mixture of wastes to be burned</li> <li>• A detailed engineering description of the incinerator for which the permit is being sought</li> <li>• A detailed description of sampling and monitoring procedures</li> <li>• A detailed test schedule for each waste for which the trial burn is planned</li> <li>• A detailed test protocol</li> <li>• A description of, and planned operating conditions for any emissions control equipment which will be used</li> <li>• Procedures for rapidly stopping waste feed, shutting down the incinerator, and controlling emissions in the event of an equipment malfunction</li> <li>• Other information requested by the regulator</li> </ul>	270.19(b) and 270.62(b)(1)  270.62(b)(2)(i)  270.62(b)(2)(ii)  270.62(b)(2)(iii)  270.62(b)(2)(iv)  270.62(b)(2)(v)  270.62(b)(2)(vi)  270.62(b)(2)(vii)  270.62(b)(2)(viii)

**EXHIBIT 2-12**  
**INFORMATION REQUIREMENTS FOR DIFFERENT PHASES OF INCINERATOR OPERATION**

<b>Phase of Operation</b>	<b>Requirements</b>	<b>Citations</b>
Within 90 Days Following a Trial Burn	<ul style="list-style-type: none"> <li>• Submit a certification that the trial burn has been carried out in accordance with the approved trial burn plan</li>   <li>• Submit certified results of the following determinations <ul style="list-style-type: none"> <li>- Quantitative analysis of the trial principal organic hazardous constituents (POHCs), oxygen and hydrogen chloride in the waste feed to the incinerator</li>   <li>- Quantitative analysis of the exhaust gas for the concentration and mass emissions of the trial POHCs, oxygen, and hydrogen chloride</li>   <li>- Quantitative analysis of the scrubber water, ash residues, and other residues</li>   <li>- Computation of destruction and removal efficiency</li>   <li>- Computation of hydrogen chloride removal efficiency if hydrogen chloride emission rate if this rate exceeds 1.8 kilograms (4 pounds) per hour</li>   <li>- Computation of particulate emissions</li>   <li>- Identification of the sources of fugitive emissions and their means of control</li>   <li>- Measurement of average, maximum, and minimum temperature and combustion gas velocity</li>   <li>- Continuous measurement of carbon monoxide in the exhaust gas</li>   <li>- Other information requested by the regulator</li> </ul> </li> </ul>	<p>270.62(b)(8)</p> <p>270.62(b)(8)-(b)(10) and 270.62(b)(7)(i)</p> <p>270.62(b)(7)(ii)</p> <p>270.62(b)(7)(iii)</p> <p>270.62(b)(7)(iv)</p> <p>270.62(b)(7)(v)</p> <p>270.62(b)(7)(vi)</p> <p>270.62(b)(7)(vii)</p> <p>270.62(b)(7)(viii)</p> <p>270.62(b)(7)(ix)</p> <p>270.62(b)(7)(x)</p>

**EXHIBIT 2-12**  
**INFORMATION REQUIREMENTS FOR DIFFERENT PHASES OF INCINERATOR OPERATION**

<b>Phase of Operation</b>	<b>Requirements</b>	<b>Citations</b>
Following Completion of a Trial Burn and Prior to Modification of the Permit to Reflect Trial Burn Results	Submit a statement identifying the conditions necessary to operate in compliance with performance standards for destruction removal efficiency, hydrogen chloride emissions, and particulate matter. The statement must include restrictions on waste constituents, waste feed rates, and other operating parameters.	270.62(c)(1), 264.343, and 264.345

will be permitted for operation. (Existing incinerators will have operational data that can be used instead of trial burn results as the basis for developing permitted operating conditions.) Consequently, many of the conditions in the initial permit may be revised once monitoring results associated with the trial burn are available. Specific regulations applicable to the permitting process for new incinerators are located in 40 CFR 270.62, special forms of permits.

#### Operational Readiness

Once the initial permit has been issued and construction is completed, the DOE permit application manager for a new incinerator must demonstrate that the incinerator is ready to enter an operational readiness (also called a start-up/shake down) period. This demonstration involves fulfilling the information requirements listed in the first row of Exhibit 2-12. The regulator uses this information (and any other relevant information submitted with the Part B permit application) to develop specific permit conditions applicable to the operational readiness period [40 CFR 270.62 (a)(2)].

#### Trial Burn

The next phase of incinerator permitting involves preparing for and performing a trial burn. To enter this phase, the DOE permit application manager must fulfill the information requirements listed in the second row of Exhibit 2-12. Based on this information, the regulator specifies the trial burn principal organic hazardous constituents (POHCs) for which destruction and removal efficiencies must be calculated during the trial burn.

#### Submit Information

The last phase of incinerator permitting begins after a trial burn. During this phase, DOE permit application managers must submit the information listed in the third row of Exhibit 2-12. This information is used to develop the actual conditions under which the incinerator may operate.

#### Exemption from POHC Treatment Requirements for Incinerators that Do Not Burn Wastes Containing Hazardous Constituents

Incinerators that do not burn wastes containing hazardous constituents (i.e., the wastes are hazardous because they are ignitable, corrosive, or reactive) are exempt from incinerator requirements applicable to the treatment of POHCs. DOE permit application managers must establish their eligibility for this exemption in the initial permit application. Exhibit 2-13 lists the information that must be submitted with the Part B permit application to establish eligibility for this exemption.

The trial burn phase of incinerator permitting may be waived for existing incinerators and for new incinerators that can meet the requirements of the waiver. (New incinerators rarely meet these requirements.) Exhibit 2-13 lists the information that must be submitted with the Part B permit application for a trial burn waiver to be considered by the permit writer.

- Boilers and Industrial Furnaces (BIFs)

On February 21, 1991 (56 FR 7134), EPA published regulations applying permitting procedures and emissions standards to BIFs that burn hazardous waste. These procedures and standards are very similar to the standards applicable to incinerators. Prior to the publication of the final BIF rule, burning hazardous waste in BIFs was unregulated under the Federal RCRA rules.

The BIF rule contains many exemptions, including a small quantity burner exemption that is applicable to DOE-owned BIFs that burn hazardous waste. All DOE-owned BIFs that burn hazardous waste currently qualify for this exemption from permitting and emissions standards. DOE has no plans to build new BIFs to combust hazardous waste or to permit existing BIFs that do not qualify for this exemption.

To qualify for the small quantity burner exemption, the following criteria must be met (40 CFR 266.108).

- Hazardous waste cannot exceed one percent of the total fuel requirements of the device on a mass or heat input basis.
- The waste, as generated, must have a minimum heating value of 5,000 BTU per pound.
- Only hazardous wastes that are generated on the same site as the boiler or industrial furnace can be burned in these devices.

**EXHIBIT 2-13**  
**INFORMATION REQUIREMENTS FOR DIFFERENT INCINERATOR EXEMPTIONS**

Type of Exemption	Requirements	Citations
Exemption From Some Incinerator Requirements Based on Waste Criteria	<ul style="list-style-type: none"> <li>● Submit documentation showing that the waste is <ul style="list-style-type: none"> <li>- Listed as a hazardous waste solely because it is ignitable or corrosive,</li> </ul> <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> <li>- Listed as a hazardous waste solely because it meets certain definitions of reactivity and will not be burned when other hazardous wastes are present in the combustion zone,</li> </ul> <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> <li>- A hazardous waste solely because it possesses the characteristic of ignitability or corrosivity, or both,</li> </ul> <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> <li>- A hazardous waste solely because it possesses certain reactivity characteristics and will not be burned when other hazardous wastes are present in the combustion zone,</li> </ul> <p style="text-align: center;">OR</p> <li>● Submit documentation showing that the waste meets one of the above conditions and contains insignificant concentrations of the hazardous constituents listed in 40 CFR 261, Appendix VIII</li> </li></ul>	<p>270.19(a)(1) and 264.340(b)(1)(i)</p> <p>270.19(a)(2) and 264.340(b)(1)(ii)</p> <p>270.19(a)(3) and 264.340(b)(1)(iii)</p> <p>270.19(a)(4) and 264.340(b)(1)(iv)</p> <p>270.19(a)(1) - (4) and 264.340(b) and (c)</p>

**EXHIBIT 2-13**  
**INFORMATION REQUIREMENTS FOR DIFFERENT INCINERATOR EXEMPTIONS**

Type of Exemption	Requirements	Citations
Exemption From Trial Burn Requirements Based On Submission of Information	<ul style="list-style-type: none"> <li>• Submit an analysis of each waste or mixture of wastes to be burned</li> <li>• Submit a detailed engineering description of the incinerator</li> <li>• Submit information to support the contention that a trial burn is not needed, e.g., A description and analysis of the waste to be burned compared with the waste for which data from operational readiness or other trial burns are available</li> <li>• Submit comparative design and operating conditions data</li> <li>• Submit a description of the results submitted from any previously conducted trial burn</li> <li>• Submit expected incinerator operation information</li> <li>• Submit supplemental information requested by the regulator</li> <li>• Submit waste analysis data</li> </ul>	<p>270.19(c)(1)</p> <p>270.19(c)(2)</p> <p>270.19(c)(3)</p> <p>270.19(c)(4)</p> <p>270.19(c)(5)</p> <p>270.19(c)(6), 264.343, and 264.345</p> <p>270.19(c)(7)</p> <p>270.19(c)(8)</p>

- The following wastes, which may contain dioxins, cannot be burned under this exemption: F020, F021, F023, F026, and F027.
- The quantity of hazardous wastes burned in any calendar month cannot exceed the levels specified in 40 CFR 266.108(a). Allowable levels vary according to the terrain-adjusted effective stack height of the BIF; the higher the BIF's terrain-adjusted stack height, the greater the allowable hazardous waste burning rate.
- A one-time notification must be sent to the regulator. It must include a statement certifying that the BIF qualifies for the exemption and identify the maximum allowable hazardous waste quantity that may be burned per month.

- Miscellaneous Units

Part B permit applications for miscellaneous units must fulfill all of the information requirements in 40 CFR 270.23. These requirements are listed on Exhibit 2-14.

Types of Miscellaneous Units

Miscellaneous units include:

- geologic repositories (such as DOE's Waste Isolation Pilot Plant) other than injection wells;
- thermal treatment units (such as the glass melter at DOE's Mound facility in Miamisburg, Ohio) other than incinerators or BIFS;
- units where explosive wastes are open-burned or open-detonated (OB/OD units); and
- chemical, biological, or physical treatment units that are not otherwise designated by the regulations as RCRA units (e.g., tanks, containers, surface impoundments, landfills, incinerators, etc.).



**EXHIBIT 2-14**  
**INFORMATION REQUIREMENTS FOR MISCELLANEOUS UNITS**

Requirements	Citations
<ul style="list-style-type: none"> <li>● Provide a detailed description of the unit being used or proposed for use including <ul style="list-style-type: none"> <li>- Physical characteristics, materials of construction, and dimensions</li> <li>- Detailed plans and engineering reports describing how the unit will be located, designed, constructed, operated, maintained, inspected and closed in a manner that will protect human health and the environment</li> <li>- For disposal units, a detailed description of the plans to comply with requirements to protect human health and the environment in the post-closure care period</li> </ul> </li> <li>● Provide detailed hydrogeologic, geologic, and meteorologic assessments and land use maps for the regions surrounding the site that address and ensure compliance of the unit with environmental performance standards</li> <li>● Provide information on the potential pathways of exposure of humans or environmental receptors to hazardous waste or hazardous constituents</li> <li>● For treatment units, provide a report on a demonstration of the effectiveness of the treatment based on laboratory or field data</li> <li>● Provide any additional information determined by the regulator to be necessary for evaluation of compliance of the unit with environmental performance standards</li> <li>● Provide a risk assessment to show that releases that could have adverse effects on human health and the environment from migration of waste constituents into groundwater or the subsurface environment, surface water, wetlands, soil surface, or air will be prevented</li> </ul>	<p>270.23(a)(1)</p> <p>270.23(a)(2), 264.601, and 264.602</p> <p>270.23(a)(3) and 264.603</p> <p>270.23(b) and 264.601</p> <p>270.23(c)</p> <p>270.23(d)</p> <p>270.23(e) and 264.601</p> <p>264.601(a) - (c) and EPA Draft Guidance*</p>

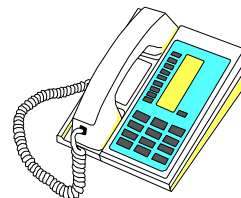
\* 40 CFR Part 264, Subpart X: Draft Permit Writers Technical Resource Document, U.S. Environmental Protection Agency (October 1993)

The distinction between incinerators and other types of thermal treatment units that would be considered miscellaneous units is not always clear. EPA considers plasma arc furnaces and infrared furnaces to be incinerators if they have a secondary combustion chamber or other incinerator pollution control equipment. Plasma arc furnaces and infrared furnaces that do not have a secondary combustion chamber may be permitted as miscellaneous units on a case-by-case basis (see 57 FR 38558; August 25, 1992).

The Distinction Between Miscellaneous Units and Other Units is Not Always Clear

A gray area for DOE is the temporary storage of transuranic waste on pads. At the Savannah River Site, the State of South Carolina has agreed to consider permitting several transuranic waste storage pads, where wastes are being stored until they can be sent to WIPP, as miscellaneous units. It is unclear if EPA Regions and other States would consider this approach.

The definition of miscellaneous units and permit application requirements for these units will continue to change as experience with permitting them increases. In the meantime, DOE permit application managers should negotiate the classification of units that could possibly qualify as miscellaneous units with regulators long before the permit application is prepared.



- Containment Buildings

No Permitting Regulations Applicable to Containment Buildings

There are no specific information requirements in 40 CFR 270 that are applicable to the submission of RCRA Part B permit applications for containment buildings. Technical standards applicable to containment buildings were included in the Federal Register notice for final Land Disposal Restrictions for Newly Listed Wastes and Hazardous Debris (57 FR 37194; August 18, 1992).

In the absence of specific Part B information requirements, permit application managers should include information in the RCRA Part B permit application that will allow the permit writer to evaluate the compliance of containment buildings with applicable technical standards. These standards are located

in 40 CFR 264.1101 and are summarized on Exhibit 2-15. Additionally, closure and post-closure requirements for containment buildings should be addressed in the Part B permit application, when appropriate. These are located in 40 CFR 264.1102 and are discussed in Submodule 2-2-2-8.

Containment Buildings  
Where Free Liquids Will Be  
Present Must Meet Stricter  
Standards

As shown on Exhibit 2-15, containment building standards are more stringent if the building/unit will be used to manage hazardous waste containing free liquids or treated with free liquids. (Free liquids are defined as liquids which readily separate from the solid portion of a waste under ambient temperature and pressure (40 CFR 260.10). The Paint Filter Liquids Test can be used to determine if a waste contains free liquids. [The Paint Filter Liquids Test is included in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, EPA Publication SW-846, available from the National Technical Information Service.]) DOE permit application managers for containment buildings where free liquids will be present must demonstrate that the buildings meet design and operating standards specific to the control of liquids [see 40 CFR 264.1101(b)].

DOE permit application managers for containment buildings where free liquids will be present in limited amounts for dust suppression only may apply for a waiver of secondary containment requirements [40 CFR 264.1101(e)]. In this case, the owner/operator must demonstrate that free liquids are necessary to meet occupational safety and health requirements (e.g., to control exposures to dust or asbestos) and that containment of managed wastes and liquids can be assured in the absence of a secondary containment system. The waiver request and demonstration should be included in the Part B permit application.

**EXHIBIT 2-15**  
**REQUIREMENTS FOR CONTAINMENT BUILDINGS\***

Type of Containment Building/Unit	Requirements	Citation
All Containment Buildings	<ul style="list-style-type: none"> <li>• Must be completely enclosed with a floor, walls, and a roof to prevent exposure to the elements</li> </ul>	264.1101(a)(1)
	<ul style="list-style-type: none"> <li>• The floor and containment walls must be designed and constructed               <ul style="list-style-type: none"> <li>- Of materials of sufficient strength and thickness to support themselves, the waste contents, and any personnel and heavy equipment that operate within the unit; and</li> <li>- To prevent failure due to pressure gradients settlement, compression, or uplift, physical contact with the hazardous wastes to which they are exposed; climatic conditions, and the stresses of daily operations; and</li> <li>- So that it has sufficient structural strength to prevent collapse or other failure.</li> </ul> </li> </ul>	264.1101(a)(2)
	<ul style="list-style-type: none"> <li>• All surfaces to be in contact with hazardous wastes must be chemically compatible with those wastes.</li> </ul>	264.1101(a)(2)
	<ul style="list-style-type: none"> <li>• An exception to the structural strength requirement may be made for light weight doors and windows that provide an effective barrier against fugitive dust emissions as long as wastes do not come into contact with these openings</li> </ul>	264.1101(a)(2)(i), 264.1101(a)(2)(ii), and 264.1101(c)(1)(iv)
	<ul style="list-style-type: none"> <li>• Incompatible wastes or treatment reagents must not be placed in the unit or its secondary containment system if they could cause the unit/system to leak, corrode, or otherwise fail</li> </ul>	264.1101(a)(3)
	<ul style="list-style-type: none"> <li>• Must have a primary barrier designed to withstand the movement of personnel, waste and handling equipment</li> </ul>	264.1101(a)(4)

**EXHIBIT 2-15**  
**REQUIREMENTS FOR CONTAINMENT BUILDINGS\***

Type of Containment Building/Unit	Requirements	Citation
All Containment Buildings	<ul style="list-style-type: none"> <li>• Owners/operators must use controls and practices to ensure containment of hazardous waste within the unit</li> <li>• Owners/operators must obtain certification from a registered professional engineer that the building design meets applicable standards</li> <li>• Owners/operators must repair conditions that could lead to or have caused a release of hazardous waste</li> </ul>	<p>264.1101(c)(1) (i) - (iv)</p> <p>264.1101(c)(2)</p> <p>264.1101(c)(3) (i) - (iii)</p>
Containment Buildings Used to Manage Hazardous Wastes Containing Free Liquids or treated With Free Liquids	<ul style="list-style-type: none"> <li>• Must have a primary barrier designed and constructed of materials to prevent the migration of hazardous constituents into the barrier</li> <li>• Must have a liquid collection and removal system to minimize the accumulation of liquid on the primary barrier</li> <li>• Must have a secondary containment system including a secondary barrier and a leak detection system capable of detecting failure if the primary barrier and collecting accumulated hazardous wastes and liquids at the earliest practicable time</li> </ul>	<p>264.1101(b)(1)</p> <p>264.1101(b)(2)</p> <p>264.1101(b)(3) (i) - (iii)</p>
Containment Buildings Having Areas Both With and Without Secondary Containment	<ul style="list-style-type: none"> <li>• Owner/operators must design and operate each area in accordance with appropriate requirements</li> <li>• Owner/operator must take measures to prevent the release of liquids or wet materials into areas without secondary containment</li> <li>• Owner/operator must maintain a written description of the operating procedures used to maintain the integrity of areas without secondary containment in the operating log</li> </ul>	<p>264.1101(d)(1)</p> <p>264.1101(d)(2)</p> <p>264.1101(d)(3)</p>

\*See Exhibit 2-20 for inspection requirements applicable to containment buildings

- Emission Controls for Process Vents

Distillation Equipment,  
Fractionation Equipment,  
Thin-Film Evaporation  
Equipment, Solvent  
Extraction Equipment, Air  
or Steam Stripping  
Equipment

Exhibit 2-16 lists the permit application information requirements for process vents. The technical standards corresponding to these permit application information requirements are located in 40 CFR 264 subpart AA. These standards apply to process vents on the following types of equipment in hazardous waste management units managing waste with a total organic concentration of 10 parts per million (ppm) by weight or greater: distillation equipment, fractionation equipment, thin-film evaporation equipment, solvent extraction equipment, and air or steam stripping equipment [40 CFR 264.1030(b)].

- Emission Controls for Equipment Leaks

Valves; Pumps;  
Compressors; Pressure  
Relief Devices; Sampling  
Connection Systems;  
Open-Ended Valves, Lines  
or Flanges

Exhibit 2-17 lists the permit application information requirements for equipment leaks. The technical standards corresponding to these permit application information requirements are located in 40 CFR 264 subpart BB. These standards are applicable to the following types of equipment if the equipment contains or contacts hazardous waste with an organic concentration of at least 10 percent by weight [40 CFR 264.1050(b)]: valves; pumps; compressors; pressure relief devices; sampling connection systems; open-ended valves, lines, or flanges; and any control devices required by subparts AA and BB of 40 CFR 264. However, equipment that is in vacuum service can be excluded from the requirements of 40 CFR 264, subpart BB if it is identified on a list in the facility's operating record [40 CFR 264.1050(e)]. Likewise, equipment that contains or contacts hazardous waste with an organic concentration of at least 10 percent by weight for a period of less than 300 hours per calendar year can be excluded from the requirements of 40 CFR 264, subpart BB if such equipment is identified by list or location (area or group) in the facility's operating record [40 CFR 264.1050(f)].

**EXHIBIT 2-16**  
**INFORMATION REQUIREMENTS FOR PROCESS VENTS**

Type of Unit/ Facility	Requirements	Citations
Unit/Facility With Process Vents That Cannot Install a Closed-Vent System and Control Device to Comply With 40 CFR 264, Subpart AA, Before the Date the Unit/Facility Becomes Subject to either 40 CFR 264, Subpart AA or 40 CFR 265, Subpart AA	Provide an implementation schedule that includes the dates by which the closed-vent system and control device will be installed and in operation. The controls must be installed as soon as possible, but the implementation schedule may allow up to 30 months for installation and startup after the date that a facility becomes subject to Subpart AA.	270. 24(a) and 264.1033(a)(2)
Any Unit/Facility With Process Vents That Are Subject to 40 CFR 264, Subpart AA	<p>Provide documentation of compliance with the process vent standards, including:</p> <ul style="list-style-type: none"> <li>Information and data identifying all affected process vents, annual throughput and operating hours of each affected unit, estimated emission rates for each affected vent and for the overall unit/facility, and the approximate location within the facility of each affected unit</li> <li>Information and data supporting estimates of vent emissions and emission reduction achieved by add-on control devices based on engineering calculations or source tests</li> <li>Information and data used to determine whether or not a process vent is subject to the requirements of 40 CFR 264.1032</li> </ul>	<p>270.24(b)(1) and 264.1032</p> <p>270.24(b)(2) and 264.1032</p> <p>270.24(b)(3) and 264.1032</p>

**EXHIBIT 2-16**  
**INFORMATION REQUIREMENTS FOR PROCESS VENTS**

Type of Unit/ Facility	Requirements	Citations
Unit/Facility with Process Vents Subject to 40 CFR 264, Subpart AA Applying to Install a Control Device Other Than a Thermal Vapor Incinerator, Catalytic Vapor Incinerator, Flare, Boiler, Process Heater, Condenser, or Carbon Adsorption System	<ul style="list-style-type: none"> <li>● Provide documentation describing operation of the control device and identifying process parameters that indicate proper operation and maintenance</li> <li>● If compliance with 40 CFR 264.1032 will be determined using testing, provide a performance test plan including: <ul style="list-style-type: none"> <li>– An explanation of how testing at the waste management unit's highest load or capacity will be achieved, and</li> <li>– A detailed engineering description of the closed-vent system and control device</li> </ul> </li> </ul>	<p>264.1033(j)</p> <p>270.24(c) and</p> <p>264.1035(b)(3)(i)</p> <p>264.1035(b)(3)(ii)</p>
Unit/Facility With Process Vents Subject to 40 CFR 264, Subpart AA That Are Equipped With Closed-vent Systems and Control Devices	<p>Provide documentation of compliance with standards for closed-vent systems and control devices, including:</p> <ul style="list-style-type: none"> <li>● A list of all information references and sources used in preparing the compliance documentation</li> <li>● Records, including the dates of each compliance test</li> <li>● A design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams addressing vent stream characteristics and control device operation parameters</li> <li>● A statement signed and dated by the owner/operator certifying that the operating parameters used in the design analysis reasonably represent operations at the highest load or capacity levels expected to occur</li> </ul>	<p>270.24(d)(1) and 264.1033</p> <p>270.24(d)(2) and 264.1033(k)</p> <p>270.24(d)(3) and 264.1035(b)(4)(iii)</p> <p>270.24(d)(4) and 264.1033</p>



**EXHIBIT 2-16**  
**INFORMATION REQUIREMENTS FOR PROCESS VENTS**

Type of Unit/ Facility	Requirements	Citations
	<ul style="list-style-type: none"> <li>• A statement signed and dated by the owner/operator certifying that the operating parameters used in the design analysis reasonably represent operations at the highest load or capacity levels expected to occur</li> </ul>	270.24(d)(4) and 264.1033
	<ul style="list-style-type: none"> <li>• A statement signed and dated by the owner/operator certifying that the control device is designed to operate at an efficiency of 95 weight percent or greater, unless emission limits can be achieved by a control device involving vapor recovery at an efficiency less than 95 weight percent</li> </ul>	270.24(d)(5), 264.1033(b)

**EXHIBIT 2-17**  
**INFORMATION REQUIREMENTS FOR EQUIPMENT SUBJECT TO AIR EMISSIONS STANDARDS**  
**FOR LEAKS (40 CFR 264, SUBPART BB)**

Type of Unit/ Facility	Requirements	Citations
All Units/Facilities With Equipment Subject to 40 CFR 264, Subpart BB	<ul style="list-style-type: none"> <li>● Provide the following information for each piece of equipment:</li> </ul>	
	<ul style="list-style-type: none"> <li>- Equipment identification number and hazardous waste management unit identification</li> </ul>	270.25(a)(1)
	<ul style="list-style-type: none"> <li>- Approximate locations within the unit/facility</li> </ul>	270.25(a)(2)
	<ul style="list-style-type: none"> <li>- Type of equipment (e.g., a pump or pipeline valve)</li> </ul>	270.25(a)(3)
	<ul style="list-style-type: none"> <li>- Percent by weight total organics in the hazardous waste stream at the equipment</li> </ul>	270.25(a)(4)
	<ul style="list-style-type: none"> <li>- Hazardous waste physical state at the equipment (e.g., gas/vapor or liquid)</li> </ul>	270.25(a)(5)
	<ul style="list-style-type: none"> <li>- Method of compliance with the standard (e.g., "monthly leak detection and repair" or "pumps are equipped with dual mechanical seals")</li> </ul>	270.25(a)(6)
	<ul style="list-style-type: none"> <li>● Provide documentation that demonstrates compliance with equipment standards for</li> </ul>	270.25(d) and
	<ul style="list-style-type: none"> <li>- Pumps in light liquid service</li> </ul>	264.1052
	<ul style="list-style-type: none"> <li>- Compressors</li> </ul>	264.1053
	<ul style="list-style-type: none"> <li>- Pressure relief devices in gas/vapor service</li> </ul>	264.1054
	<ul style="list-style-type: none"> <li>- Sampling connecting systems</li> </ul>	264.1055
	<ul style="list-style-type: none"> <li>- Open-ended valves or lines</li> </ul>	264.1056
	<ul style="list-style-type: none"> <li>- Valves in gas vapor service or in light liquid service</li> </ul>	264.1057
	<ul style="list-style-type: none"> <li>- Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors</li> </ul>	264.1058

**EXHIBIT 2-17**  
**INFORMATION REQUIREMENTS FOR EQUIPMENT SUBJECT TO AIR EMISSIONS STANDARDS**  
**FOR LEAKS (40 CFR 264, SUBPART BB)**

Type of Unit/ Facility	Requirements	Citations
Unit/Facility That Cannot Install a Closed-Vent System and Control Device to Comply with 40 CFR 264, Subpart BB, Before the Effective Date That the Unit/Facility Becomes Subject to Subpart BB	<p>Provide an implementation schedule that includes the dates by which the closed-vent system and control device will be installed and in operation. The controls must be installed as soon as possible, but the implementation schedule may allow up to 30 months after the date that a facility becomes subject to Subpart BB for installation and startup.</p> <p>All units that begin operation after December 21, 1990, must comply with the rules immediately (i.e., must have control devices installed and operating on startup of the affected unit); the 2-year implementation schedule does not apply to these units.</p>	270.25(b), 264.1033(a)(2) and 264.1064(b)(2)
Units/Facilities With Equipment Subject to 40 CFR 264, Subpart BB Having Closed-Vent Systems and Control Devices	<p>Provide documentation of compliance with standards for closed-vent systems and control devices, including:</p> <ul style="list-style-type: none"> <li>• A list of all information references and sources used in preparing the documentation demonstrating compliance with 40 CFR 264.1033 (Closed-vent Systems and Control Device Standards)</li> <li>• Records, including the dates of each compliance test</li> <li>• A design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams addressing vent stream characteristics and control device operation parameters.</li> <li>• A statement signed and dated by the owner/operator certifying that the operating parameters used in the design analysis reasonably represent operations at the highest load or capacity levels expected to occur</li> <li>• A statement signed and dated by the owner/operator certifying that the control device is designed to operate at an efficiency of 95 weight percent or greater</li> </ul>	<p>264.1060 and 270.25(e)(1)</p> <p>264.1033(j) and 270.25(e)(2)</p> <p>264.1035(b)(4)(iii) and 270.25(e)(3)</p> <p>270.25(e)(4)</p> <p>264.1060 and 270.25(e)(5)</p>

**EXHIBIT 2-17**  
**INFORMATION REQUIREMENTS FOR EQUIPMENT SUBJECT TO AIR EMISSIONS STANDARDS**  
**FOR LEAKS (40 CFR 264, SUBPART BB)**

<b>Type of Unit/ Facility</b>	<b>Requirements</b>	<b>Citations</b>
Unit/Facility Applying to Install a Control Device Other Than a Thermal Vapor Incinerator, Catalytic Vapor Incinerator, Flare, Boiler, Process Heater, Condenser, or Carbon Adsorption System	<ul style="list-style-type: none"> <li>● Provide documentation to describe operation and identify the process parameters that indicate proper operation and maintenance.</li> <li>● If test data will be used to determine organic removal efficiency or total organic concentrations achieved by a control device, provide a performance test plan including: <ul style="list-style-type: none"> <li>– An explanation of how testing at the waste management unit's highest load or capacity will be achieved, and</li> <li>– A detailed engineering description of the closed-vent system and control device</li> </ul> </li> </ul>	<p>264.1033(j)</p> <p>270.25(c) and 264.1035(b)(3)</p>

- Emission Controls for Tanks, Surface Impoundments, and Containers

Regulatory History of  
Subpart CC of 40 CFR  
Part 264 and Subpart CC of  
40 CFR Part 265

On December 6, 1994, EPA promulgated regulations requiring owners/operators of containers, tanks, and surface impoundments to control air emissions from these units (subpart CC of 40 CFR 264 and subpart CC of 40 CFR 265). Subsequently, EPA delayed the effective date of the subpart CC regulations three times (see 60 FR 26828, May 19, 1995; 60 FR 56952, November 13, 1995; and 61 FR 28508, June 5, 1996), and issued an indefinite stay of the standards specific to units managing wastes produced by certain organic peroxide manufacturing processes (60 FR 50426, September 29, 1995). In August 1995, EPA published notice of, and requested comments on, revisions being considered for the final subpart CC standards [60 FR 41870 (August 14, 1995)]. After considering the comments, EPA promulgated technical amendments on February 9, 1996 (61 FR 4903), and on November 25, 1996 (61 FR 59932) amended and clarified the organic air emission standards in 40 CFR parts 264 and 265, subparts AA and BB, as well as subpart CC. Full implementation of the amended subpart CC regulations began on December 6, 1996.

Exemption from 40 CFR  
Part 264, Subpart CC for  
Waste Management Units  
Used **Solely** for Management  
of Radioactive Mixed Waste

The 40 CFR 264 subpart CC requirements do not apply to waste management units used **solely** for the management of radioactive mixed waste in accordance with applicable regulations promulgated under the authority of the Atomic Energy Act and the Nuclear Waste Policy Act. However, EPA plans to further investigate methods for effective control of organic emissions from these units that will be consistent with required waste management practices under these acts (59 FR 62914; December 6, 1994). EPA has clarified that use of “solely” in this exclusion does not preclude adding other materials to a unit managing radioactive mixed waste if applicable regulations under the Atomic Energy Act or the Nuclear Waste Policy Act require that materials other than radioactive mixed waste be added to the unit [61 FR 4903, 4904 (February 9, 1996)].



Tanks

The RCRA Part B permit application must provide information demonstrating that hazardous waste tanks subject to the air pollutant emission control standards for tanks will comply with Tank Level 1 or Tank Level 2 controls, as appropriate. The first row of Exhibit 2-18 lists the information that should be included when Tank Level 1 controls will be used. The second row of Exhibit 2-18 lists the information needed when Tank Level 2 controls will be used. Any hazardous waste tank that meets all three conditions specified by 40 CFR 264.1084(b)(1)

(see Exhibit 2-18, row 1) is allowed to install either Tank Level 1 or Tank Level 2 controls. Tanks not meeting the three conditions must install Tank Level 2 controls. Inspection requirements not covered by Exhibit 2-18 are discussed in submodule 2-2-2-5.

#### Containers

The third row on Exhibit 2-18 lists the air emission control information that must be included in the RCRA Part B permit application for hazardous waste containers. The container emissions standards in 40 CFR 264, subpart CC are divided into three levels. Containers with design capacity greater than 0.1 cubic meters ( $m^3$ ) but less than or equal to  $0.46 m^3$  must comply with container Level 1 standards [40 CFR 264.1086(b)(1)(i)]. Container Level 1 standards also apply to containers with design capacity greater than  $0.46 m^3$  that *are not* in light material service [40 CFR 264.1086(b)(1)(ii)]. Containers with design capacity greater than  $0.46 m^3$  that *are* in light material service must comply with container Level 2 standards [40 CFR 264.1086(b)(1)(iii)]. Finally, containers with design capacity greater than  $0.1 m^3$  that are used for waste stabilization must comply with container Level 3 standards whenever the hazardous waste is exposed to the atmosphere [40 CFR 264.1086(b)(2)]. The container level standards are specified in 40 CFR 264.1086(c) (Level 1), 264.1086(d) (Level 2) and 264.1086(e) (Level 3).

**EXHIBIT 2-18**  
**INFORMATION REQUIREMENTS FOR AIR EMISSION CONTROLS**  
**FOR TANKS, SURFACE IMPOUNDMENTS, AND CONTAINERS (40 CFR 264, SUBPART CC)\***

Type of Facility/Unit	RCRA Part B Permit Application Information Requirements	Citations
Tanks** With Tank Level 1 Controls	<ul style="list-style-type: none"> <li>Information showing that the tank meets each of the following conditions: <ul style="list-style-type: none"> <li>The maximum organic vapor pressure of the tank's contents is less than the tank's design capacity</li> <li>The tank's contents are not heated above the temperature at which their maximum organic vapor pressure was calculated</li> <li>The tank's contents have not been treated using a waste stabilization process</li> </ul> </li> <li>Information describing how the fixed roof design complies with 264.1084(c)(2)</li> </ul>	264.1084(b)(1)(i) 264.1084(b)(1)(ii) 264.1084(b)(1)(iii) 264.1084(c)(2)
Tanks** With Tank Level 2 Controls	<ul style="list-style-type: none"> <li>For each floating roof cover, provide: <ul style="list-style-type: none"> <li>Information describing the cover design</li> <li>Certification that the cover meets applicable design specifications in 40 CFR 264.1084(e)(1) (for internal floating roofs) or 40 CFR 264.1084(f)(1) (for external floating roofs)</li> </ul> </li> <li>For each tank enclosure that is vented through a closed-vent system to an enclosed combustion control device provide: <ul style="list-style-type: none"> <li>Records for the most recent set of calculations and measurements verifying that the enclosure qualifies as a permanent total enclosure according to 40 CFR 52.741, Appendix B</li> </ul> </li> <li>For each pressure tank, provide information describing how the tank design complies with 264.1084(h)</li> <li>For each tank vented through a closed-vent system to a control device, provide information describing how the tank design complies with 264.1084(g)</li> </ul>	270.27(a)(1), 264.1084(e)(1) and 264.1084(f)(1)  270.27(a)(3), 264.1084(d)(5) and 264.1084(i)(1)  264.1084(d)(4)  264.1084(d)(3)
Containers***	<ul style="list-style-type: none"> <li>Identify container areas subject to the 40 CFR 264, Subpart CC requirements</li> <li>Provide a certification by the owner/operator that the requirements of Subpart CC are met</li> </ul>	270.27(a)(2)  270.27(a)(2), 264.1086(b), (c), (d), and (e)
Containers (cont'd.)	<ul style="list-style-type: none"> <li>For each container enclosure that is vented through a closed-vent system to an enclosed combustion control device, provide: <ul style="list-style-type: none"> <li>Records for the most recent set of calculations and measurements verifying that the enclosure qualifies as a permanent total enclosure according to 40 CFR 52.741, Appendix B</li> </ul> </li> <li>Information describing the enclosure design</li> </ul>	270.27(a)(3), 264.1086(e)(1)(ii)

**EXHIBIT 2-18**  
**INFORMATION REQUIREMENTS FOR AIR EMISSION CONTROLS**  
**FOR TANKS, SURFACE IMPOUNDMENTS, AND CONTAINERS (40 CFR 264, SUBPART CC)\***

Type of Facility/Unit	RCRA Part B Permit Application Information Requirements	Citations
Surface Impoundments****	<p>For each floating membrane cover installed on a surface impoundment, provide:</p> <ul style="list-style-type: none"> <li>• Information describing the cover design</li> <li>• Certification by the owner/operator that the cover meets 40 CFR 265.1085(c) specifications</li> </ul>	270.27(a)(4), 264.1085(c), and 265.1086(e)
Tanks, Containers and Surface Impoundments Vented Through Closed-vent Systems and Control Devices Installed in Accordance With 40 CFR 264.1087	<ul style="list-style-type: none"> <li>• If proper performance will be determined using testing, provide a performance test plan including: <ul style="list-style-type: none"> <li>- An explanation of how testing at the waste management unit's highest load or capacity will be achieved, and</li> <li>- A detailed engineering description of the closed-vent system and control device</li> </ul> </li> </ul> <p>Provide documentation of design and performance including:</p> <ul style="list-style-type: none"> <li>• A list of all information references and sources used to prepare the documentation</li> <li>• Records, including the dates of each compliance test</li> <li>• A design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams addressing vent stream characteristics and control device operating parameters</li> <li>• A statement signed and dated by the owner/operator certifying that the operating parameters used in the design analysis reasonably represent operations at the highest load or capacity levels expected to occur</li> <li>• A statement signed and dated by the owner/operator certifying that the control device is designed to operate at an efficiency of 95 weight percent or greater, unless emission limits can be achieved by a control device involving vapor recovery at an efficiency less than 95 weight percent</li> </ul>	270.27(a)(5), 264.1087, 270.24(c), and 270.24(d)
All Units/Facilities Subject to 40 CFR 264, Subpart CC Standards	Provide an emission monitoring plan for both method 21(in 40 CFR part 60, Appendix A) and control device monitoring methods. The plan must include information about monitoring points, monitoring methods for control devices, monitoring frequency, procedures for documenting exceedances, and procedures for mitigating noncompliances.	270.27(a)(6)



**EXHIBIT 2-18**  
**INFORMATION REQUIREMENTS FOR AIR EMISSION CONTROLS**  
**FOR TANKS, SURFACE IMPOUNDMENTS, AND CONTAINERS (40 CFR 264, SUBPART CC)\***

Type of Facility/Unit	RCRA Part B Permit Application Information Requirements	Citations
Existing Tanks, Containers and Surface Impoundments Subject to 40 CFR Part 265, Subpart CC That Cannot Comply With 40 CFR 264, Subpart CC by the Date of Permit Issuance	Provide a schedule of implementation	270.27(a)(7) and 264.1082

NOTES

- \* The 40 CFR 264 Subpart CC requirements do not apply to waste management units:
- that hold hazardous waste placed in the unit before December 6, 1996 and to which no hazardous waste was added on or after December 6, 1996;
  - used solely for on-site treatment or storage of hazardous waste generated as a result of implementing remedial activities required under RCRA corrective action authorities, under CERCLA authorities, or under similar Federal or State authorities [40 CFR 264.1080(b)(5)];
  - used solely for the management of radioactive mixed waste in accordance with all applicable regulations under the authority of the Atomic Energy Act and the Nuclear Waste Policy Act [40 CFR 264.1080(b)(6)]. If any materials other than radioactive mixed wastes are added after June 6, 1996 to units used to treat or store mixed waste, the regulatory deferral is lost unless the addition is required by regulations implementing the Atomic Energy Act or the Nuclear Waste Policy Act [61 FR 4903, 4904 (Feb. 9, 1996)]; or
  - that are certified as being equipped with and operating emission controls in accordance with Clean Air Act requirements set forth in an applicable section of 40 CFR part 60, 61 or 63 [40 CFR 164.1080(b)(7)].

**EXHIBIT 2-18**  
**INFORMATION REQUIREMENTS FOR AIR EMISSION CONTROLS**  
**FOR TANKS, SURFACE IMPOUNDMENTS, AND CONTAINERS (40 CFR 264, SUBPART CC)\***

NOTES (cont.)

\*\* The 40 CFR 264 Subpart CC requirements do not apply to tanks:

- that no longer receive hazardous waste if closure has been initiated or completed [40 CFR 1080(b)(3)]; or
- that have process vents as defined by 40 CFR 264.1030 [40 CFR 264.1080(b)(8)].

The standards in 40 CFR 264.1084 and 264.1087 do not apply to tanks:

- where entering hazardous waste has an average volatile organic concentration at its point of generation of less than 500 parts per million by weight [40 CFR 264.1082(c)(1)];
- where entering hazardous waste has been subjected to an organic removal or destruction process meeting specified conditions [40 CFR 264.1082(c)(2)];
- where the tank is used for biological treatment in accordance with 40 CFR 264.1082(c)(2)(iv) [40 CFR 264.1082(c)(3)];
- where entering hazardous waste meets applicable LDR standards [40 CFR 264.1082(c)(4)]; or
- where the tank is used for bulk feed to a waste incinerator and meets specified conditions [40 CFR 264.1082(c)(5)].

\*\*\* The 40 CFR 264 Subpart CC requirements do not apply to containers with a design capacity less than or equal to 0.1m<sup>3</sup> [40 CFR 264.1080(b)(2)].

The standards in 40 CFR 264.1086 and 264.1087 do not apply to containers:

- where entering hazardous waste has an average volatile organic concentration at its point of generation of less than 500 parts per million by weight [40 CFR 264.1082(c)(1)];
- where entering hazardous waste has been subjected to an organic removal or destruction process meeting specified conditions [40 CFR 264.1082(c)(2)]; or
- where entering hazardous waste meets applicable LDR standards [40 CFR 264.1082(c)(4)].

\*\*\*\* The 40 CFR 264 Subpart CC requirements do not apply to surface impoundments no longer receiving hazardous waste if closure has been initiated or completed [40 CFR 264.1080(b)(4)].

The standards in 40 CFR 264.1085 and 264.1087 do not apply to surface impoundments:

- where entering hazardous waste has an average volatile organic concentration at its point of generation of less than 500 parts per million by weight [40 CFR 264.1082(c)(1)];
- where entering hazardous waste has been subjected to an organic removal or destruction process meeting specified conditions [40 CFR 264.1082(c)(2)]; or
- where entering hazardous waste meets applicable LDR standards [40 CFR 264.1082(c)(4)].

#### Surface Impoundments

The fourth row on Exhibit 2-18 lists the air emission control permit application information requirements for surface impoundments. Surface impoundments containing organic hazardous wastes that are subject to 40 CFR 264, subpart CC must be equipped with either a cover that is vented through a closed-vent system to a control device, or a floating membrane cover [40 CFR 264.1085(b)]. Specifications for floating membrane covers are provided in 40 CFR 264.1085(c). Also, 40 CFR 264.1085(d) gives specifications for surface impoundment covers vented through closed-vent systems to control devices.

#### Units Equipped With Closed-vent Systems and Control Devices

Other provisions of 40 CFR 264, subpart CC and shown on the fifth row on Exhibit 2-18 are specific requirements applicable to closed-vent systems and control devices installed on tanks, containers or surface impoundments.

- Such closed-vent systems must meet the design and operating standards specified in 40 CFR 264.1033(k) for closed-vent systems installed on process vents subject to subpart AA.
- Such control devices must reduce the total organic content of the inlet vapor stream by at least 95 percent by weight, or be an enclosed combustion device or flare designed to meet subpart AA emissions standards for closed-vent systems installed on process vents as specified in 40 CFR 264.1033(c) and (d).

#### Many Exemptions

The subpart CC regulations contain a number of exemptions. Footnotes to Exhibit 2-18 show which types of hazardous waste management units are exempt from the entire rule and from specific portions of the rule.

Groundwater monitoring information requirements for regulated units (defined as surface impoundments, waste piles, land treatment units, and landfills that received waste after July 26, 1982) are listed on Exhibit 2-19. Groundwater monitoring must also be performed at miscellaneous units (e.g., open burning/open detonation units) if necessary to meet the environmental performance standards specified in 40 CFR 264.601.

#### Waiver

- The first row on Exhibit 2-19 lists the information that must be provided in the permit application if a waiver from groundwater monitoring is being sought.

Existing Units	<ul style="list-style-type: none"> <li>● The second row on Exhibit 2-19 is applicable to existing (interim status) units that are seeking a permit. Groundwater monitoring data obtained during the interim status period help to determine the type of groundwater monitoring program necessary once the unit receives a permit.</li> </ul>
All Units	<ul style="list-style-type: none"> <li>● The third row on Exhibit 2-19 is applicable to all units where groundwater monitoring will be performed.</li> </ul>
Detection Monitoring	<ul style="list-style-type: none"> <li>● The fourth row on the Exhibit 2-19 is applicable to units where detection monitoring will be performed. Detection monitoring is designed to detect a change in groundwater quality in wells surrounding a unit subject to the groundwater monitoring requirement.</li> </ul>
Compliance Monitoring	<ul style="list-style-type: none"> <li>● The fifth row on Exhibit 2-19 is applicable to units where compliance monitoring will be performed. Compliance monitoring is designed to determine whether a groundwater protection standard has been exceeded. A groundwater protection standard is established when a statistically significant release is detected at the waste management unit boundary under a detection monitoring program.</li> </ul>
Corrective Action Monitoring	<ul style="list-style-type: none"> <li>● The sixth row on Exhibit 2-19 is applicable to units where a corrective action monitoring will be performed. Corrective action is required when hazardous constituents exceed the groundwater protection standard at the point of compliance.</li> </ul>

**EXHIBIT 2-19**  
**GROUNDWATER MONITORING INFORMATION FOR REGULATED UNITS\***

Type of Regulated Unit	RCRA Part B Permit Application Information Requirements	Citations
Regulated Unit For Which an Exemption From Groundwater Monitoring is Sought	<ul style="list-style-type: none"> <li>● Provide information demonstrating that: <ul style="list-style-type: none"> <li>- The unit is an engineered structure;</li> <li>- The unit does not receive or contain liquid waste or waste containing free liquids;</li> <li>- The unit is designed and operated to exclude liquid, precipitation, and other run-on and run-off;</li> <li>- The unit has both inner and outer layers of containment enclosing the waste;</li> <li>- The unit has a leak detection system built into each containment layer;</li> <li>- Leak detection systems will be operated and maintained during the active life of the unit and the closure and post-closure care periods; and</li> <li>- Hazardous constituents will not be allowed to migrate beyond the outer containment layer;</li> </ul> </li> <li style="text-align: center;">OR</li> <li>● Provide information that is certified by a qualified geologist or geotechnical engineer to demonstrate that there is no potential for migration of liquid to the uppermost aquifer</li> </ul>	<p>264.90(b)(2)(i)</p> <p>264.90(b)(2)(ii)</p> <p>264.90(b)(2)(iii)</p> <p>264.90(b)(2)(iv)</p> <p>264.90(b)(2)(v)</p> <p>264.90(b)(2)(vi)</p> <p>264.90(b)(2)(vii)</p> <p>264.90(b)(4)</p>
Existing (Interim Status) Regulated Units	Provide a summary of the groundwater monitoring data obtained during the interim status period	270.14(c)(1)
All Regulated Units Where Groundwater Monitoring Is Required	<ul style="list-style-type: none"> <li>● Comply with topographic map requirements (see Exhibit 2-3)</li> <li>● Provide detailed plans and an engineering report describing the proposed groundwater monitoring program including description of wells, description of sampling and analysis procedures, description of procedures for establishing background quality, and statistical procedures</li> </ul>	<p>270.14(c)(2),(3), and (4)</p> <p>270.14(c)(5) and 264.97</p>

**EXHIBIT 2-19**  
**GROUNDWATER MONITORING INFORMATION FOR REGULATED UNITS\***

Type of Regulated Unit	RCRA Part B Permit Application Information Requirements	Citations
Regulated Units Where A Detection Monitoring Program Is Required	<p>Submit sufficient information, data, and analyses to establish a detection monitoring program</p> <ul style="list-style-type: none"> <li>Identify indicator parameters, waste constituents, and reaction products to be monitored</li> <li>Describe the proposed groundwater monitoring system</li> <li>Provide background groundwater concentration values for proposed parameters</li> <li>Provide proposed sampling and analysis procedures for evaluating data</li> </ul>	<p>270.14(c)(6) and 264.98</p> <p>270.14(c)(6)(i)</p> <p>270.14(c)(6)(ii)</p> <p>270.14(c)(6)(iii)</p> <p>270.14(c)(6)(iv)</p>
Regulated Units Where A Compliance Monitoring Program Is Required	<p>Submit sufficient information, data, and analyses to establish compliance monitoring programs</p> <ul style="list-style-type: none"> <li>Provide a description of wastes previously handled</li> <li>Provide a characterization of contaminated groundwater</li> <li>Identify hazardous constituents to be monitored in the compliance program</li> <li>Provide proposed concentration limits for each hazardous constituent or a justification for alternate concentration limits</li> <li>Provide detailed plans and an engineering report describing the proposed groundwater monitoring system</li> <li>Provide a description of proposed sampling, analysis, and statistical comparison procedures to be used in evaluating groundwater data</li> </ul>	<p>270.14(c)(7) and 264.99</p> <p>270.14(c)(7)(i)</p> <p>270.14(c)(7)(ii)</p> <p>270.14(c)(7)(iii), 264.97, and 264.99</p> <p>270.14(c)(7)(iv) and 264.94(a)</p> <p>270.14(c)(7)(v) and 264.97</p> <p>270.14(c)(7)(vi)</p>

**EXHIBIT 2-19**  
**GROUNDWATER MONITORING INFORMATION FOR REGULATED UNITS\***

<b>Type of Regulated Unit</b>	<b>RCRA Part B Permit Application Information Requirements</b>	<b>Citations</b>
Regulated Units Where Corrective Action is Required	<p>Submit sufficient information, supporting data, and analyses to establish a corrective action program</p> <ul style="list-style-type: none"> <li>• Provide a characterization of the contaminated groundwater</li> <li>• Provide the concentration limit for each hazardous constituent found in the groundwater</li> <li>• Provide detailed plans and an engineering report describing the corrective action to be taken or a schedule for submission of this information</li> <li>• Provide a description of how the groundwater monitoring program will demonstrate the adequacy of corrective action or a schedule for submission of this information</li> </ul>	<p>270.14(c)(8) and 264.100</p> <p>270.14(c)(8)(i)</p> <p>270.14(c)(8)(ii) and 264.94</p> <p>270.14(c)(8)(iii) and 270.14(c)(8)(v)</p> <p>270.14(c)(8)(iv) and 270.14(c)(8)(v)</p>

\* A regulated unit is a surface impoundment, waste pile, land treatment unit, or landfill that received waste after July 26, 1982.

Propose Groundwater  
Monitoring Requirements

In the RCRA Part B permit application, DOE permit application managers should propose the type of groundwater monitoring to be performed. The permit application may propose that detection monitoring, compliance monitoring, corrective action monitoring, or any combination of these three types of monitoring be performed at a particular facility. If more than one type of monitoring is proposed in the permit application, the application should specify the locations, circumstances, or conditions under which each program will be instituted.

Wherever applicable in this section of the permit application (Inspection Schedule, Preparedness and Prevention, Contingency Plan), DOE permit application managers may propose monitoring for radioactivity as a surrogate for chemicals monitoring to determine if a release of mixed waste has occurred. Because the hazardous and radioactive components of mixed waste are inseparable, there cannot be a release of hazardous constituents that does not exhibit radioactivity. If a radioactivity threshold level is exceeded, released materials would then have to undergo chemical analysis.



- Security

Use SOPs Covering  
Security

Exhibit 2-20 lists information requirements for security procedures and equipment and requirements for requesting a waiver from these conditions. If existing standard operating procedures (SOPs) cover facility security, DOE permit application managers can use this information to draft the section of the permit application addressing security procedures and equipment.



**EXHIBIT 2-20**  
**INFORMATION REQUIREMENTS FOR SECURITY PROCEDURES AND EQUIPMENT [40 CFR 270.14(b)(4)]**

Type of Unit/ Facility	RCRA Part B Permit Application Information Requirements	Citation
Unit/Facility Seeking a Waiver of Security Requirements	<ul style="list-style-type: none"> <li>• Demonstrate that physical contact with the waste, structures, or equipment within the active portion of the facility will not injure persons or livestock</li> <li>• Demonstrate that disturbance of the waste or equipment by the entry of persons or livestock into the active portion of the facility will not cause a violation</li> </ul>	<p>264.14(a)(1)</p> <p>264.14(a)(2)</p>
Unit/Facility Submitting Security Procedures and Equipment Information	<ul style="list-style-type: none"> <li>• Demonstrate that the facility has a 24-hour surveillance system which continuously monitors and controls entry onto the active portion of the facility</li> </ul> <p style="text-align: center;">OR</p> <p>Demonstrate that the facility has</p> <ul style="list-style-type: none"> <li>- An artificial or natural barrier which completely surrounds the active portion of the facility, AND</li> <li>- A means to control entry at all times</li> </ul> <ul style="list-style-type: none"> <li>• Demonstrate that the facility has, or will have, a sign with the legend "Danger - Unauthorized Personnel Keep Out" at each entrance to the active portion of the facility and at other locations, in sufficient numbers to be seen from any approach to the active portion</li> <li>- The legend must be written in English and in other languages predominant in the area</li> <li>- The legend must be legible from a distance of 25 feet</li> </ul>	<p>264.14(b)(1)</p> <p>264.14(b)(2)(i)</p> <p>264.14(b)(2)(ii)</p> <p>264.14(c)</p>

- Inspection Schedule

Exhibit 2-21 lists the general inspection schedule requirements for all process units and for specific types of process units. The application information specific to particular process units may be put in those portions of the permit application pertaining to these units or in a general inspection schedule applicable to the entire facility. To assist the permit writer, the location of this information should be referenced in the section(s) where it is not included.

Propose Remote Inspection  
for Shielded Areas

DOE permit application managers should propose to inspect process units in high-activity areas by remote means (e.g., mirrors, cameras) if walk-through inspections would jeopardize ALARA goals. Remote methods are recognized in the *Joint EPA/NRC Guidance on the Storage of Mixed Low-Level Radioactive and Hazardous Waste*, Draft for Comment [60 FR 40204 (Aug. 7, 1995)] as acceptable for inspecting high-activity mixed wastes in storage.



- Preparedness and Prevention

Put this Information in the  
Contingency Plan

Exhibit 2-22 lists the information requirements applicable to preparedness and prevention. As shown on the exhibit, the DOE permit application manager may supply information showing that compliance with some of these requirements is not necessary in view of the hazards posed by the waste handled by the facility. Preparedness and prevention arrangements are generally included in the facility's contingency plan (see Submodule 2-2-2-6 below).

- General Hazard Prevention

Exhibit 2-23 presents the information needed to document that specific procedures, structures, or equipment are available to prevent different types of hazards.

**EXHIBIT 2-21**  
**GENERAL INSPECTION SCHEDULE REQUIREMENTS**

RCRA Part B Permit Application Information Requirements	Citations
<p style="text-align: center;"><u>All Process Units</u></p> <ul style="list-style-type: none"> <li>● Provide a copy of the general inspection schedule</li> <li>● The schedule must identify the types of problems which are to be looked for during the inspection</li> <li>● The frequency of inspection for each item on the schedule should be based on the rate of deterioration of the equipment and the probability of an environmental or human health incident if a problem goes undetected between inspections</li> <li>● Areas subject to spills must be inspected daily when in use</li> </ul> <p style="text-align: center;"><u>Specific Process Units</u></p> <ul style="list-style-type: none"> <li>● <b>Containers</b> -- Areas where containers are stored must be inspected at least weekly</li> <li>● <b>Tanks</b> <ul style="list-style-type: none"> <li>- Until secondary containment is provided, perform annual leak testing for underground tanks and ancillary equipment as specified in appropriate regulations</li> <li style="text-align: center;">OR</li> <li>- For tanks that can be entered, develop a schedule and procedure for assessing the tank's condition</li> <li>- Develop a schedule and procedure for inspecting overfill controls</li> <li>- Above ground portions of tank systems, data gathered from monitoring and leak detection equipment, and construction materials and the area immediately surrounding the accessible portion of a tank system must be inspected at least once each operating day</li> <li>- The proper operation of cathodic protection systems must be confirmed within 6 months after initial installation and annually thereafter</li> <li>- All sources of impressed current must be inspected and/or tested at least bimonthly</li> </ul> </li> <li>● <b>Surface Impoundments</b> <ul style="list-style-type: none"> <li>- During construction and installation, liners and cover systems must be inspected for uniformity, damage and imperfections</li> </ul> </li> </ul>	<p>270.14(b)(5) and 264.15(b)</p> <p>264.15(b)(3)</p> <p>264.15(b)(4)</p> <p>264.15(b)(4)</p> <p>270.14(b)(5) and 264.174</p> <p>270.14(b)(5) and 264.193(i)(1)-(3)</p> <p>270.14(b)(5) and 264.195(a)</p> <p>270.14(b)(5) and 264.195(b)(1)-(3)</p> <p>270.14(b)(5) and 264.195(c)(1)</p> <p>270.14(b)(5) and 264.195(c)(2)</p> <p>270.14(b)(5) and 264.226(a)</p>

**EXHIBIT 2-21**  
**GENERAL INSPECTION SCHEDULE REQUIREMENTS**

RCRA Part B Permit Application Information Requirements	Citations
<ul style="list-style-type: none"> <li>- Liners and covers must be inspected immediately after construction or installation</li> <li>- While a surface impoundment is in operation, it must be inspected weekly and after storms</li> <li>- For surface impoundments with leak detection systems, <ul style="list-style-type: none"> <li>-- The amount of liquid removed from each leak detection system sump must be recorded at least once each week during the active life and closure period</li> <li>-- After the final cover is installed, the amount of liquids removed from each leak detection system sump must be recorded at least monthly</li> </ul> </li> <li>● <b>Landfills</b> <ul style="list-style-type: none"> <li>- During construction and installation, liners and cover systems must be inspected for uniformity, damage and imperfections</li> <li>- Liners and covers must be inspected immediately after construction and installation</li> <li>- While a landfill is in operation, it must be inspected weekly and after storms</li> <li>- For landfills with leak detection systems, <ul style="list-style-type: none"> <li>-- The amount of liquid removed from each leak detection system sump must be recorded at least once each week during the active life and closure period</li> <li>-- After the final cover is installed, the amount of liquids removed from each leak detection system sump must be recorded at least monthly</li> </ul> </li> </ul> </li> <li>● <b>Incinerators</b> <ul style="list-style-type: none"> <li>- The incinerators and associated equipment must be inspected at least daily</li> <li>- The emergency waste feed cut-off system and associated alarms must be tested at least weekly to verify operability unless the applicant demonstrates that less frequent inspections, i.e., monthly inspections, will be adequate</li> </ul> </li> <li>● <b>Miscellaneous Units</b> <ul style="list-style-type: none"> <li>- Inspections should ensure compliance with environmental performance standards in 40 CFR 264.601</li> </ul> </li> </ul>	<p>270.14(b)(5) and 264.226(a)(1)-(2)</p> <p>270.14(b)(5) and 264.226(b)(1)-(3)</p> <p>270.14(b)(5) and 264.226(d)(1)</p> <p>270.14(b)(5) and 264.226(d)(2)</p> <p>270.14(b)(5) and 264.303(a)</p> <p>270.14(b)(5) and 264.303(a)(1)-(2)</p> <p>270.14(b)(5) and 264.303(b)(1)-(3)</p> <p>270.14(b)(5) and 264.303(c)(1)</p> <p>270.14(b)(5) and 264.303(c)(2)</p> <p>270.14(b)(5) and 264.347(b)</p> <p>270.14(b)(5) and 264.347(c)</p> <p>270.14(b)(5) and 264.602</p>
<ul style="list-style-type: none"> <li>● <b>Containment Buildings</b> <ul style="list-style-type: none"> <li>- At least once every seven days, data from monitoring equipment, leak detection equipment, and from inspecting the containment building and surrounding area, shall be recorded in the facility's operating record.</li> </ul> </li> </ul>	<p>270.14(b)(5) and 264.1101(c)(4)</p>

**EXHIBIT 2-21**  
**GENERAL INSPECTION SCHEDULE REQUIREMENTS**

RCRA Part B Permit Application Information Requirements	Citations
<ul style="list-style-type: none"> <li>● <b>Process Vents/Closed Vent Systems and Control Devices</b> <ul style="list-style-type: none"> <li>– Readings from process vent monitoring devices must be inspected at least once each operating day</li> <li>– Closed-vent systems installed on process vents must be monitored and inspected according to the requirements of 40 CFR 264.1033(l)</li> </ul> </li> <li>● <b>Equipment Leaks/Pumps In Light Liquid Service</b> <ul style="list-style-type: none"> <li>– Each pump in light liquid service shall be checked by visual inspection each calendar week unless the pump meets the requirements of 40 CFR 264.1052(d), (e), or (f)</li> </ul> </li> <li>● <b>Equipment Leaks/Compressors</b> <ul style="list-style-type: none"> <li>– Each barrier fluid system on compressors must be checked daily or equipped with an audible alarm that must be checked monthly to ensure that it is functioning, unless the compressor is designated for no detectable emissions</li> </ul> </li> <li>● <b>Equipment Leaks/pumps and Valves in Heavy Liquid Service, Pressure Relief Devices in Light Liquid or Heavy Liquid Service and Flanges and Other Connectors</b> <ul style="list-style-type: none"> <li>– Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service and flanges and other connectors must be monitored within 5 days following discovery of evidence of a potential leak</li> </ul> </li> </ul>	<p>270.14(b)(5) and 264.1033(f)(3)</p> <p>264.1033(l)</p> <p>270.14(b)(5) and 264.1052(a)(2)</p> <p>270.14(b)(5), 264.1053(e)(1), and 264.1053(i)</p> <p>264.1058(a)</p>
<ul style="list-style-type: none"> <li>● <b>Air Emissions from Tanks, Surface Impoundments, and Containers</b> <ul style="list-style-type: none"> <li>– Inspections must be performed in accordance with: <ul style="list-style-type: none"> <li>• 40 CFR 264.1084(c)(4) (tanks using Tank Level 1 controls);</li> <li>• 40 CFR 264.1084(e)(3) (tanks using a fixed roof with an internal floating roof);</li> <li>• 40 CFR 264.1084(f)(3) (tanks using an external floating roof);</li> <li>• 40 CFR 264.1084(g)(3) (tanks that vent through a control device); and</li> <li>• 40 CFR 264.1084(i)(4), 264.1085(d)(3)(ii), 264.1086(e)(4), and 264.1087(c)(7) (tanks, surface impoundments and containers equipped with closed-vent systems and control devices)</li> </ul> </li> <li>– A written plan and schedule for monitoring and inspections listed above must be incorporated into the facility general inspection schedule.</li> </ul> </li> </ul>	<p>270.14(b)(5) and 264.1088(a)</p> <p>270.14(b)(5) and 264.1088(b)</p>

**EXHIBIT 2-22**  
**INFORMATION REQUIREMENTS**  
**FOR PREPAREDNESS AND PREVENTION [40 CFR 270.14(b)(6)]**

RCRA Part B Permit Application Information Requirements	Citations
<ul style="list-style-type: none"> <li>Describe the internal communications or alarm system to provide emergency instruction to facility personnel*</li> </ul>	264.32(a)
<ul style="list-style-type: none"> <li>Describe the device or devices that can be used to summon emergency assistance from local police departments, fire departments, or state or local emergency response teams*</li> </ul>	264.32(b)
<ul style="list-style-type: none"> <li>Describe portable fire extinguishers, fire control equipment, spill control equipment, and decontamination equipment*</li> </ul>	264.32(c)
<ul style="list-style-type: none"> <li>Document that water volume and pressure is adequate to operate preparedness and prevention equipment*</li> </ul>	264.32(d)
<ul style="list-style-type: none"> <li>Provide testing and maintenance schedule for preparedness and prevention equipment</li> </ul>	264.33
<ul style="list-style-type: none"> <li>Demonstrate that all personnel involved in a hazardous waste operation will have immediate access to an internal alarm or emergency communication device*</li> </ul>	264.34
<ul style="list-style-type: none"> <li>Demonstrate that aisle space will be sufficient to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of the facility*</li> </ul>	264.35
<ul style="list-style-type: none"> <li>Document preparedness and prevention arrangements with police, fire departments, emergency response teams, and local hospitals (or document that attempts to make arrangements have taken place)**</li> </ul>	264.37(a) and (b)

\* DOE permit application managers may provide documentation that the requirement is not necessary based on the hazards posed by the waste handled at the facility (264.32, 264.34 and 264.35).

\*\* This information must be provided in the facility's contingency plan (see Exhibit 2-25).

**EXHIBIT 2-23**  
**INFORMATION REQUIREMENTS FOR GENERAL HAZARD**  
**PREVENTION [40 CFR 270.14(b)(8)]**

Requirements	Citations
<p>Describe the procedures, structures, or equipment used at the facility to</p> <ul style="list-style-type: none"> <li>● Prevent hazards in unloading operations (e.g., ramps, special forklifts)</li> <li>● Prevent runoff from hazardous waste handling areas to other areas of the facility or environment, or to prevent flooding (e.g., berms, dikes, trenches)</li> <li>● Prevent contamination of water supplies</li> <li>● Mitigate effects of equipment failure and power outages</li> <li>● Prevent undue exposure of personnel to hazardous waste (e.g., protective clothing)</li> <li>● Prevent releases to atmosphere</li> </ul>	<p>270.14(b)(8)(i)</p> <p>270.14(b)(8)(ii)</p> <p>270.14(b)(8)(iii)</p> <p>270.14(b)(8)(iv)</p> <p>270.14(b)(8)(v)</p> <p>270.14(b)(8)(vi)</p>

- Prevention of Reaction of Ignitable, Reactive, and Incompatible Wastes

Exhibit 2-24 presents the information needed to demonstrate that the reaction of ignitable, reactive and incompatible wastes will be prevented. Because the same or similar information must be presented for each type of process unit where ignitable, reactive, or incompatible wastes could be present (see Exhibits 2-7, 2-8, 2-9, and 2-10), the permit application manager may want to refer to this information or combine all of the information relevant to prevention of reaction of ignitable, reactive, and incompatible wastes in one section of the permit application.

Exhibit 2-25 lists contingency plan information requirements. As shown on the exhibit (third row), facilities with Spill Prevention Control and Countermeasures (SPCC) plans need only amend the plan to address hazardous waste contingencies/emergencies to have the SPCC plan serve as the RCRA contingency plan.

Use SPCC Plan

DOE Order 151.1

DOE permit application managers may want to describe the applicable requirements in DOE Order 151.1, Comprehensive Emergency Management System. In addition, DOE guidance entitled *Preparation of RCRA Contingency Plans* (DOE/EH-0274, July 1992) addresses contingency plan preparation.

Exhibit 2-26 lists the permit application information requirements applicable to personnel training. As shown on the Exhibit, the training program must address maintaining the facility in a safe manner and be geared to specific job tasks and functions.



**EXHIBIT 2-24**  
**PREVENTION OF REACTION OF IGNITABLE,**  
**REACTIVE AND INCOMPATIBLE WASTES [40 CFR 270.14 (b)(9)]**

RCRA Part B Application Information Requirements	Citations
<ul style="list-style-type: none"> <li>Describe precautions to prevent accidental ignition or reaction of ignitable or reactive waste <ul style="list-style-type: none"> <li>separation and protection of waste from sources of ignition or reaction including open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks, spontaneous ignition and radiant heat</li> <li>confinement of smoking and open flames of specially designated locations while ignitable or reactive waste is being handled</li> </ul> </li> </ul>	264.17(a)
<ul style="list-style-type: none"> <li>Describe precautions to prevent reactions which <ul style="list-style-type: none"> <li>generate extreme heat or pressure, fire or explosives, or violent reactions</li> <li>produce uncontrolled toxic mists, fumes, dust, or gases in sufficient quantities to threaten human health or the environment</li> <li>produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosives</li> <li>damage the structural integrity of the device or facility</li> <li>threaten human health or the environment</li> </ul> </li> </ul>	264.17(b) 264.17(b)(1) 264.17(b)(2) 264.17(b)(3) 264.17(b)(4) 264.17(b)(5)
<ul style="list-style-type: none"> <li>Provide information to document compliance based on <ul style="list-style-type: none"> <li>references to published scientific or engineering literature</li> <li>data from trial tests</li> <li>data from waste analysis</li> <li>results of the treatment of similar wastes by similar treatment processes and under similar operating conditions</li> </ul> </li> </ul>	264.17(c)

**EXHIBIT 2-25**  
**CONTINGENCY PLAN INFORMATION REQUIREMENTS**

Type of Facility	RCRA Part B Application Information Requirements	Citations
All Facilities	Provide a contingency plan designed to minimize hazards to human health and the environment from fires, explosions, and unplanned releases of hazardous waste or hazardous waste constituents to air, soil, or surface water	270.14(b)(7) and 264.51(a)
Facilities Preparing Contingency Plans to Meet 40 CFR 264, Subpart D, Contingency Plan and Emergency Procedures	<ul style="list-style-type: none"> <li>● Describe the actions that will be taken by the emergency coordinator to respond to an imminent or actual emergency situation</li> <li>● Describe the reporting actions that will be taken by the emergency coordinator to respond to a release, fire, or explosion and to assess possible resulting hazards to human health and the environment</li> <li>● Describe the actions that will be taken by the emergency coordinator in the event he/she determines that the facility has had a release, fire, or explosion which could threaten human health or the environment outside the facility</li> <li>● Describe the measures that will be taken by the emergency coordinator to ensure that fires, explosions, and releases will not occur, recur, or spread to other hazardous waste at the facility during an emergency</li> <li>● Describe the measures that will be taken to monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment (as appropriate) in the event that the facility stops operations in response to a fire, explosion, or release</li> <li>● Describe how the emergency coordinator will provide for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion</li> <li>● Describe how the emergency coordinator will ensure that <ul style="list-style-type: none"> <li>- No waste that is incompatible with released material will be treated, stored, or disposed in the affected area of the facility until cleanup is completed AND</li> <li>- Emergency equipment in the affected area of the facility will be cleaned and fit for its intended use before operations resume</li> </ul> </li> </ul>	<p>264.52(a) and 264.56(a)</p> <p>264.52(a), 264.56(b), and 264.56(c)</p> <p>264.52(a) and 264.56(d)</p> <p>264.52(a) and 264.56(e)</p> <p>264.52(a) and 264.56(f)</p> <p>264.52(a) and 264.56(g)</p> <p>264.52(a) and 264.56(h)(1)</p> <p>264.56(h)(2)</p>

**EXHIBIT 2-25**  
**CONTINGENCY PLAN INFORMATION REQUIREMENTS**

<b>Type of Facility</b>	<b>RCRA Part B Application Information Requirements</b>	<b>Citations</b>
(cont'd)	<ul style="list-style-type: none"> <li>Describe arrangements agreed to by local police departments, fire departments, hospitals, contractors, and state and local emergency response teams to coordinate emergency services</li> <li>Provide a list of all emergency equipment at the facility, the location of each piece of equipment, a physical description of each item on the list, and a brief outline of the capabilities of emergency equipment</li> <li>Provide an evacuation plan for facility personnel if there is a possibility that evacuation could be necessary</li> </ul>	<p>264.52(c) and 264.37</p> <p>264.52(e)</p> <p>264.52(f)</p>
Facilities Using Other Plans (e.g., SPCC Plans) to Meet 40 CFR 264, Subpart D, Contingency Plan and Emergency Procedures Requirements	Provide an amended plan that incorporates hazardous waste management provisions sufficient to comply with 40 CFR 264, Subpart D, contingency plan and emergency procedures	264.52(b)
Existing Facilities*	Provide the names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator	264.52(d) and 264.55
Surface Impoundments	Specify a procedure for removing surface impoundments from service in an emergency	264.227(c)

\* For new facilities, this information must be provided at the time of certification, rather than at the time of permit application.

**EXHIBIT 2-26**  
**PERSONNEL TRAINING INFORMATION**

<b>RCRA Part B Permit Application Information Requirements</b>	<b>Citations</b>
<ul style="list-style-type: none"> <li>● Provide an outline of introductory and continuing training programs. Where applicable, demonstrate that the training program addresses: <ul style="list-style-type: none"> <li>- Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment</li> <li>- Key parameters for automatic waste feed cut-off systems</li> <li>- Communications or alarm systems</li> <li>- Response to fires or explosives</li> <li>- Response to groundwater contamination incidents</li> <li>- Shutdown operations</li> </ul> </li> <li>● Provide a brief description of how training will be designed to meet actual job tasks</li> </ul>	<p>270.14(b)(12) and 264.16</p> <p>264.16(a)(3)(i)</p> <p>264.16(a)(3)(ii)</p> <p>264.16(a)(3)(iii)</p> <p>264.16(a)(3)(iv)</p> <p>264.16(a)(3)(v)</p> <p>264.16(a)(3)(vi)</p> <p>270.14(b)(12) and 264.16(d)(3)</p>

**Submodule 2-2-2-8:**  
**CLOSURE AND**  
**POST-CLOSURE**  
**PLANS**

Develop a Separate  
Closure Plan for  
Each Type of Unit

Closure Performance  
Standard Must Be Satisfied

- Closure Plans

Exhibit 2-27 lists closure plan information requirements. As shown on the exhibit, there are closure plan information requirements applicable to all types of units as well as unit-specific closure plan requirements. Because of the detailed unit-specific requirements, it will generally be easier to address closure plan requirements by developing a separate closure plan for each different type of unit covered by the RCRA permit application.

When preparing closure plans, DOE permit application managers should demonstrate that closure performed according to the plan will satisfy the closure performance standard in 40 CFR 264.111. This standard requires the owner/operator to close the facility in a manner that:

- minimizes the need for further maintenance [40 264.111(a)]; and
- controls, minimizes, or eliminates, to the extent necessary to protect human health and the environment, post-closure release of hazardous waste, hazardous constituents, leachate, contaminated runoff, or hazardous waste decomposition products to the ground or surface waters or to the atmosphere [40 CFR 264.111(b)].

DOE permit application managers may also want to consult DOE guidance entitled *Closure of Hazardous and Mixed Radioactive Waste Management Units at DOE Facilities* [DOE/EGD(RCRA)-002/0690, June 1990] for additional information.

**EXHIBIT 2-27**  
**CLOSURE PLAN INFORMATION REQUIREMENTS [270.14(b)(13)]**

Type of Facility/Unit	RCRA Part B Permit Application Information Requirements	Citations
All Facilities	<ul style="list-style-type: none"> <li>• The closure plan must identify steps necessary to perform partial and/or final closure of the facility at any point during its active life</li> <li>• The closure plan must include <ul style="list-style-type: none"> <li>- A description of how each hazardous waste management unit will be closed</li> <li>- A description of how final closure of the facility will be conducted and identify the maximum extent of operations that will be unclosed during the active life of the facility</li> <li>- An estimate of the maximum inventory of hazardous wastes ever onsite over the active life of the facility and a description of the methods used to remove, transport, treat, store or dispose of all hazardous wastes</li> <li>- A detailed description of the steps needed to remove or decontaminate all hazardous waste residues and contaminated containment system components, equipment, structures, and soils</li> <li>- A detailed description of other activities necessary during the closure period</li> <li>- A schedule for closure of each hazardous waste management unit and for final closure of the facility</li> </ul> </li> </ul>	<p>264.112(b)</p> <p>264.112(b)(1) and 264.111</p> <p>264.112(b)(2) and 264.111</p> <p>264.112(b)(3)</p> <p>264.112(b)(4)</p> <p>264.112(b)(5)</p> <p>264.112(b)(6)</p>
Container Storage	Describe how all hazardous waste and hazardous waste residues will be removed from the containment system	264.112(b)(2) and 264.178
All Tank Systems	Describe how all waste residues, contaminated containment system components, contaminated soils, and structures and equipment contaminated with waste will be decontaminated	264.112(b)(2) and 264.197(a)
Tank Systems Without Secondary Containment*	Provide a contingent closure plan for performing closure in accordance with requirements applicable to landfills	264.112(b)(2), 264.197(b) and (c)
All Surface Impoundments	<p>Describe how all waste residues, contaminated containment system components, contaminated subsoils, and structures and equipment contaminated with waste and leachate will be removed or decontaminated</p> <p style="text-align: center;">OR</p> <p>Describe how free liquids will be eliminated, remaining wastes will be stabilized, and the final cover will be designed and constructed</p>	<p>264.112(b)(2) and 264.228(a)(1)</p> <p>264.112(b)(2) and 264.228(a)(2)(i) - (iii)</p>

**EXHIBIT 2-27**  
**CLOSURE PLAN INFORMATION REQUIREMENTS [270.14(b)(13)]**

Type of Facility/Unit	RCRA Part B Permit Application Information Requirements	Citations
Surface Impoundments Not Meeting the Liner Requirements of 40 CFR 264.221(a)**	Provide a contingent closure plan describing how free liquids will be eliminated, remaining wastes will be stabilized, and the final cover will be designed and constructed even if the owner/operator plans to close the surface impoundment by removing wastes in accordance with 264.228(a)(1)	264.112(b)(2) and 264.228(c)
Landfill/Landfill Cell	Describe how the final cover of the landfill or the cover of any cell will be designed and constructed	264.112(b)(2) and 264.310(a)
Incinerator	Describe how all hazardous waste and all hazardous waste residues will be removed from the incinerator site	264.112(b)(2) and 264.351
Miscellaneous Unit	Describe how appropriate closure requirements will be met	264.112(b)(2) and 264.601
Containment Building	Describe how all waste residues, contaminated containment system components, contaminated subsoils, and structures and equipment contaminated with waste and leachate will be removed or decontaminated	264.112(b)(2) and 264.1102

\* A contingent closure plan is not required for a tank system if the secondary containment requirement has been waived in accordance with 40 CFR 264.193(g).

\*\* A contingent closure plan is not required for a surface impoundment if the liner requirements have been waived in accordance with 40 CFR 264.221(b).

Post-Closure Plans Are  
Required if Wastes Will  
Remain in Place

- Post-Closure Plans

Post-closure plans must be developed for all hazardous waste management units/facilities where wastes will remain in place after closure. Such units/facilities include:

- all hazardous waste landfills, disposal surface impoundments, and land treatment units; and
- tank systems, waste piles, drip pads and surface impoundments from which all waste residues and contaminated soils, materials, components, subsoils, or structures cannot be removed or decontaminated. (These facilities must, therefore, be closed as disposal units.) [See 40 CFR 264.110, 265.110, and 270.14(b)(3)].

DOE Orders May Affect  
Post-Closure Care  
Activities

Exhibit 2-28 lists post-closure plan information requirements. DOE permit application managers may also want to inform regulators that DOE's post-closure care activities must be comply with the applicable requirements of DOE Directives including:

- DOE Order 5400.5, Radiation Protection of the Public and the Environment; and
- DOE Order 5820.2A, Radioactive Waste Management.



A DOE Information Brief entitled *RCRA Closure and Post-Closure Plans* (EH-231-009/1291, December 1991) provides additional information.



**EXHIBIT 2-28**  
**POST-CLOSURE PLAN INFORMATION REQUIREMENTS [270.14(b)(13)]**

<b>RCRA Part B Application Information Requirements</b>	<b>Citations</b>
<p>Identify the activities that will be carried on after the closure of each disposal unit. Include at least:</p> <ul style="list-style-type: none"> <li>● A description of planned monitoring activities and the frequencies at which they will be performed during the post-closure period</li> <li>● A description of planned maintenance activities and the frequencies at which they will be performed to ensure <ul style="list-style-type: none"> <li>- the integrity of the cap and final cover or other containment systems</li> </ul> <p style="text-align: center;">AND</p> <ul style="list-style-type: none"> <li>- the function of the monitoring equipment</li> </ul> </li> <li>● The name, address, and phone number of the person or office to contact about the hazardous waste disposal facility during the post-closure period</li> </ul>	<p>264.118(b)</p> <p>264.118(b)(1)</p> <p>264.118(b)(2)</p> <p>264.118(b)(2)(i)</p> <p>264.118(b)(2)(ii)</p> <p>264.118(b)(3)</p>

**Submodule 2-2-2-9:  
CORRECTIVE  
ACTION**

Corrective Action  
Requirements are  
Site-Specific

RCRA corrective action is a process for remediating releases of hazardous waste or hazardous constituents from solid waste management units (SWMUs). A SWMU is defined in EPA's proposed Corrective Action Rule (55 FR 30798; July 27, 1990) as any discernable unit at which solid wastes were placed at any time, regardless of whether the unit was intended for waste management.

Corrective action information is required in RCRA permit applications for facilities where releases from SWMUs have occurred and corrective action is mandated by the regulating agency. The type of corrective action information required in a RCRA permit application is site-specific, except that facilities in a corrective action groundwater monitoring program must provide the groundwater monitoring information listed in the sixth row on Exhibit 2-19.

DOE has published a guidance manual on RCRA corrective action entitled *RCRA Corrective Action Program Guide (Interim)* [DOE/EH-0323 (May 1993)], as well as a series of Information Briefs on RCRA corrective action and permitting.

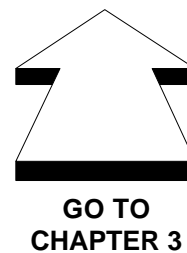
**Submodule 2-2-2-10:  
PUBLIC  
PARTICIPATION**

Permit Applications  
Submitted After June 11,  
1996 Must Address  
Pre-Application Meeting  
Requirements

On December 11, 1995, EPA amended the general requirements for the contents of RCRA Part B permit applications to require the submission of information relating to the pre-application meeting required under 40 CFR 124.31(c).

***Pre-application meeting  
requirements are discussed in  
Chapter 3.***

This requirement is applicable to every facility seeking a RCRA Subtitle C permit to treat, store, or dispose of hazardous waste that submits a RCRA Part B permit application after the effective date of the rule, which is June 11, 1996 (60 FR 63419; December 11, 1995).



The information that must be submitted in this part of the permit application is listed below.

- A summary of the pre-application meeting.
- A list of the names and addresses of meeting attendees.
- Copies of any written comments or materials submitted at the meeting [40 CFR 270.14(b)(22)].

The meeting summary need not be a verbatim account. While the regulations do not indicate a particular format for the meeting summary, EPA recommends a typewritten document that identifies major issues, points made in support of those issues, and any response made by DOE. [See *EPA RCRA Public Participation Manual*, 1996 Edition (EPA530-R-96-007), p. 3-6 (September 1996)].

**Submodule 2-2-2-11:  
PART B  
CERTIFICATION**

The following certification statement is required in all RCRA permit applications [40 CFR 270.11(d)].

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Although the Part B Certification can be placed anywhere in the permit application, it is commonly placed at the beginning or end of the application.

## MODULE 2-3: Waste Minimization and Exposure Assessment

### Submodule 2-3-1: **WASTE MINIMIZATION**

The RCRA regulations require RCRA permittees to certify at least annually that:

- there is a program in place to reduce the volume and toxicity of hazardous waste that is generated; and
- the proposed method of treatment, storage or disposal is the most practicable method currently available that minimizes the present and future threat to human health and the environment.

This certification must be placed in the facility's operating record [40 CFR 264.73(b)(9)].

In addition, Executive Order 12856, *Federal Compliance with Right-To-Know Laws and Pollution Prevention Requirements* (58 FR 41981; August 6, 1993) requires each Federal Facility to develop a pollution prevention plan by the end of 1995.

Consequently, DOE permit application managers should be prepared to furnish a waste minimization certification as well as a waste minimization/pollution prevention plan to back up the certification in the event that this information is requested by the permitting authority.

Certification of Waste  
Minimization Should Be  
Available

Pollution Prevention Plan  
Should Be Available

### Submodule 2-3-2: **EXPOSURE ASSESSMENT**

All RCRA permit applications for facilities that treat, store, or dispose of RCRA hazardous waste in surface impoundments or landfills that are submitted after August 8, 1985, must be accompanied by an exposure assessment. The exposure assessment must contain information "reasonably ascertainable by the owner or operator" on the potential for the public to be exposed to hazardous wastes or hazardous constituents through releases related to the unit. At a minimum, such information must address:

- reasonably foreseeable potential releases from both normal operations and accidents at the unit, including

Exposure Assessments  
Must Be Performed for  
Surface Impoundments and  
Landfills

releases associated with transportation to or from the unit;

- the potential pathways of human exposure to hazardous wastes or constituents resulting from releases from the unit; and
- the potential magnitude and nature of the human exposure resulting from such releases [40 CFR 270.11(j)(1)(i) - (iii)].

Usually a Separate Document

The exposure assessment is usually submitted in a document accompanying the RCRA Part B permit application.

## MODULE 2-4: Reapplication

### **Submodule 2-4-1: DURATION OF RCRA PERMITS**

10-Year Limit on Duration  
of RCRA Permits

RCRA permits have a fixed term, not to exceed 10 years [40 CFR 270.50(a)]. The permit term is assigned by the responsible regulatory agency at the time the permit is issued. Permits for land disposal facilities must be reviewed by the permitting authority five years after the date of permit issuance or reissuance. When the term assigned to a permit expires, the permit must be modified to reflect alterations, new information, new statutory requirements or regulations, and modified compliance schedules [40 CFR 270.50(d) and 40 CFR 270.40(a)(1) - (5)].

### **Submodule 2-4-2: CONTENTS OF A RENEWAL APPLICATION**

New Application

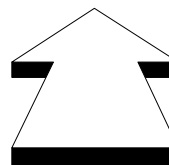
The RCRA permit renewal process involves submitting a new permit application having the same format and addressing the same subjects as the initial Part A and Part B applications [40 CFR 270.10(a)]. In preparing the application, DOE permit application managers must remember to address applicable regulatory requirements that became effective during the term of the expiring permit.

Large DOE facilities modify their RCRA permits frequently. To facilitate review of the renewal application, DOE permit application managers are reminded to highlight aspects of the application that:

- are different from the existing permit or practices, or
- reflect modifications to the permit that have been requested but not yet granted by the permitting authority.

The administrative process for RCRA permit renewal is identical to the administrative process for new permits.

**See Chapter 3 for information on the administrative process applicable to RCRA permits.**



**GO TO CHAPTER 3**

**Submodule 2-4-3:  
REAPPLICATION  
DEADLINE**

Submit Renewal Application  
at Least 180 Days Before  
Expiration

If DOE holds an expiring RCRA permit and intends to continue permitted activities beyond the expiration date, a renewal application must be submitted at least 180 days before the expiration date of the effective permit, unless permission for a later date has been granted by the permitting authority. The permitting authority may not, however, grant permission for a renewal application to be submitted later than the expiration date of the existing permit [40 CFR 270.10(h)].

**Submodule 2-4-4:  
CONTINUATION OF  
EXPIRING PERMITS**

Permit issued by EPA -  
EPA is the Permitting  
Authority

When an expiring permit was issued by EPA and EPA continues to be the permitting authority, the conditions of the expired permit continue in force until the effective date of a new permit as long as:

- The permittee has submitted a timely and complete renewal application to the appropriate EPA Regional Administrator, and
- The EPA Regional Administrator has failed to issue a new permit due to time or resource constraints [40 CFR 270.51(a)(1) and (2)].

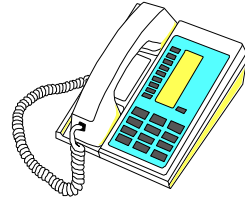
Permit issued by EPA-  
State is the Permitting  
Authority

When an expiring permit was issued by EPA, but during the permit term the State in which the facility is located is granted hazardous waste program authority under 40 CFR 271, the State will be the permitting authority. The conditions of the expired permit continue in force until the effective date of the State's issuance or denial of a state RCRA permit as long as the permittee has submitted a timely and complete application to the responsible state agency under applicable state law and regulation [40 CFR 270.51(d)].



Permit Issued by State-  
State is the Permitting  
Authority

DOE permit renewal managers should check with state regulators regarding continuation of expiring permits when an expiring permit was issued by a State with a hazardous waste program authorized under 40 CFR part 271 and the State will continue to be the permitting authority.





## **MODULE 2-5: Submitting RCRA Permit Applications or Renewal Applications**

Suggestions

This module consists of several common-sense suggestions that may help to expedite the receipt and processing of RCRA permit applications by the proper personnel.

Verify Address

- Make specific inquiries about the address to which the permit application should be sent, the reliability of available delivery services, packaging preferences, and the number of copies to deliver.

Send Copies to All Applicable Regulators

- If permitting authority is shared by a state agency and EPA, send identical copies of the entire application to both permitting authorities.



Send Copies to Evaluators

- In addition to the original submitted officially, send copies of the permit application directly to the personnel who will be evaluating it (e.g., the permit engineer or permit writer assigned by the permitting authority).

Use a Traceable Delivery Method

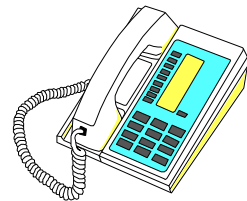
- Use a delivery method that will allow you to trace packages that are not received. If time or a deadline is an issue, the package should be certified.

Remember Fees

- Remember to include any state-required fees for processing the application.

Verify Receipt

- Verify that the permit application was received by all parties to whom it was sent. Follow up mailings/shipments of permit applications and related materials (e.g., fees) with a phone call to ensure that they arrived.



Keep Copies

- Keep multiple copies of the entire permit application in hard-copy and electronic formats. Revised applications, or portions of applications, may have to be submitted to permitting authorities to respond to Notices of Deficiency (NODs) or requests for additional information.

## **REFERENCES**

### **Statutes**

Resource Conservation and Recovery Act, P.L. 94-580, as amended.

### **Regulations**

10 CFR Part 960, "Department of Energy General Guidelines for the Recommendation of Sites for Nuclear Waste Repositories."

40 CFR Part 124, "EPA Procedures for Decisionmaking."

40 CFR Part 260, "EPA Hazardous Waste Management System: General."

40 CFR Part 264, "EPA Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities."

40 CFR Part 265, "EPA Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Units."

40 CFR Part 266, "EPA Standards for Management of Specific Hazardous Wastes and Facilities."

40 CFR Part 268, "EPA Land Disposal Restrictions."

40 CFR Part 270, "EPA Administered Permit Programs: The Hazardous Waste Permit Program."

40 CFR Part 271, "EPA Requirements for Authorization of State Hazardous Waste Programs."

### **DOE Directives**

DOE Order 5820.2A, "Radioactive Waste Management."

DOE Order O151.1, "Comprehensive Emergency Management."

DOE Order 5400.5, "Radiological Protection of the Public and the Environment."

SEN-22-90, "DOE Policy on Signatures of RCRA Permit Applications."

### **Executive Orders**

Executive Order 12586, "Federal Compliance with Right-to-Know Laws and Pollution Prevention [signed August 3, 1993; 58 FR 41981 (August 6, 1993)]

### **Federal Register**

55 FR 30798 (July 27, 1990), "Proposed rule: Corrective Action for Solid Waste Management Units at Hazardous Waste Management Facilities; Proposed Rule."

- 57 FR 37194 (August 18, 1992), "Final rule: Land Disposal Restrictions for Newly Listed Wastes and Hazardous Debris."
- 57 FR 38558 (August 25, 1992), "Final rule: Burning of Hazardous Waste in Boilers and Industrial Furnaces."
- 59 FR 62914 (December 6, 1994), "Final rule: Hazardous Waste Treatment, Storage, and Disposal Facilities and Hazardous Waste Generators; Organic Air Emission Standards for Tanks, Surface Impoundments, and Containers."
- 60 FR 26828 (May 19, 1995), "Notice of postponed effective date: Hazardous Waste Treatment, Storage, and Disposal Facilities and Hazardous Waste Generators; Organic Air Emission Standards for Tanks, Surface Impoundments, and Containers."
- 60 FR 40204 (August 7, 1995), "Joint NRC/EPA Guidance on the Storage of Mixed Low-Level Radioactive and Hazardous Waste, Draft for Comment."
- 60 FR 41870 (August 14, 1995), "Proposed rule; data availability: Hazardous Waste Treatment, Storage, and Disposal Facilities and Hazardous Waste Generators; Organic Air Emission Standards for Tanks, Surface Impoundments, and Containers."
- 60 FR 50426 (September 29, 1995), "Final rule; stay: Hazardous Waste Treatment, Storage, and Disposal Facilities and Hazardous Waste Generators; Organic Air Emission Standards for Tanks, Surface Impoundments, and Containers."
- 60 FR 56952 (November 13, 1995), "Notice of postponed effective date: Hazardous Waste Treatment, Storage, and Disposal Facilities and Hazardous Waste Generators; Organic Air Emission Standards for Tanks, Surface Impoundments, and Containers."
- 60 FR 63417 (December 11, 1995), "Final rule: RCRA Expanded Public Participation."
- 61 FR 28508 (June 5, 1996), "Amendment of final rule to postpone requirements: Hazardous Waste Treatment, Storage, and Disposal Facilities and Hazardous Waste Generators; Organic Air Emission Standards for Tanks, Surface Impoundments, and Containers."

61 FR 4903 (February 9, 1996), "Final rule; technical amendment: Hazardous Waste Treatment, Storage, and Disposal Facilities and Hazardous Waste Generators; Organic Air Emission Standards for Tanks, Surface Impoundments, and Containers."

61 FR 59932 (November 25, 1996), "Final rule: Hazardous Waste Treatment, Storage, and Disposal Facilities and Hazardous Waste Generators; Organic Air Emission Standards for Tanks, Surface Impoundments, and Containers."

### **Other Publications**

U.S. Department of Energy, *Closure of Hazardous and Mixed Waste Management Units at DOE Facilities* (DOE/EGD(RCRA)-002/0690, June 1990).

U.S. Department of Energy, Office of Environmental Policy and Assistance, RCRA/CERCLA Division, "RCRA Closure and Post-Closure Plans" (DOE/EH-231-009/1291, December 1991).

U.S. Department of Energy, *Preparation of RCRA Contingency Plans* (DOE/EH-0274, July 1992).

U.S. Department of Energy, *Preparation of RCRA Waste Analysis Plans (Interim Guidance)* (DOE/EH-0306, March 1993).

U.S. Department of Energy, *RCRA Corrective Action Program Guide* (DOE/EH-323, May 1993).

U.S. Department of Energy, *DOE Methods for Evaluating Environmental and Waste Management Samples*, DOE/EM-0089T, Rev. 2, Addendum 1.

U.S. Environmental Protection Agency, "Technical Resource Document for the Storage and Treatment of Hazardous Waste in Tank Systems" (EPA/530-SW-86-044, August 1986).

U.S. Environmental Protection Agency, "Model RCRA Permit for Hazardous Waste Management Facilities" (EPA/530-SW-90-049, September 1988).

U.S. Environmental Protection Agency, "Waste Analysis at Facilities that Generate, Treat, Store, and Dispose of Hazardous Waste" (OSWER Directive No. 9938.4-03, April 1994).

- U.S. Environmental Protection Agency, *RCRA Public Participation Manual* (EPA530-R-96-007, September 1996).
- U.S. Environmental Protection Agency, *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods* (EPA/SW-846).
- U.S. Nuclear Regulatory Commission and U.S. Environmental Protection Agency, "Clarification of RCRA Testing Requirements for Mixed Waste, Draft Guidance" (March 1992).

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# Chapter 3

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# **MANAGING RCRA PERMITTING**

## **INTRODUCTION**

Chapter 3 discusses the RCRA permitting process for DOE treatment, storage, or disposal (TSD) facilities in the context of the global task of environmental permitting and suggests ways to successfully manage the process. In contrast, Chapter 2, RCRA Permit Application, provided guidance on the content of the permit application.

### **Module 3-1 Planning for RCRA Permitting**

This module addresses environmental permitting in situations where either a new TSD unit will be constructed or an existing unit that does not currently manage hazardous wastes or radioactive mixed wastes (RMW) will be converted into a TSD unit. Information is provided to assist DOE personnel in (1) determining whether activities at the planned unit require a RCRA permit, (2) ensuring that applicable non-RCRA requirements have been met, and (3) determining requisite public participation.

### **Module 3-2 RCRA Permit Application Processing**

This module discusses the process of preparing the RCRA permit application and its review by the implementing regulatory agency. After DOE completes, signs, and submits the application, the regulator (EPA or an authorized state agency) checks it for completeness. If the permit application is not complete, the regulator must provide DOE with a written list of information still needed. When the application is complete, the regulator will notify DOE in writing, and the date of the notice becomes the effective date of the application. The regulator can request additional information after the effective date, but only to clarify, modify, or supplement previously submitted material, and such requests do not alter the prior completeness determination.

If DOE fails to complete an application after receiving a notice of deficiency, the regulator may deny the permit and take enforcement action against an operating unit for RCRA noncompliance, if appropriate. Such denial of a permit, however, does not preclude reapplication.

### **Module 3-3 RCRA Draft Permits**

This module discusses (1) how the responsible regulatory agency decides what conditions to place in a draft RCRA permit, and (2) the administrative process whereby the responsible regulatory agency makes its final permit decision after either issuing a draft RCRA permit or denying a RCRA permit application.

The regulations dictate that certain conditions must appear in RCRA TSD permits (40 CFR 270.30 and 270.32). This module summarizes the nature of the mandated conditions and describes the required content of the administrative record that the

responsible agency must create to support the conditions. Also, this module covers how DOE personnel may possibly influence the content of conditions, since the responsible regulatory agency usually adopts standardized language for some required permit conditions, while others are crafted on a case-by-case basis.

The administrative process whereby the responsible regulatory agency makes its final permit decision includes a public comment period with an opportunity for public hearings. Then, if someone who submitted comments on the draft permit and/or participated in the public hearings objects to the final permit decision, the decision can be appealed. This module describes the public comment period, the mechanism for requesting a public hearing, and the basics for filing an appeal on the final permit decision. Suggestions for participation by DOE personnel are provided.

### **Module 3-4 Duration and Termination of Permits**

This module discusses the requirements for complying with the conditions of a permit during its term and the procedures used for terminating permits.

## **MODULE 3-1: Planning for RCRA Permitting**

If DOE is considering either constructing a new hazardous waste or RMW TSD unit, or converting a non-hazardous waste management unit into a hazardous waste or RMW TSD facility, DOE personnel should begin planning as soon as possible for the environmental permitting process. Early planning should establish a “permitting road map” and preliminary schedule. Exhibit 3-1 lists the major questions that will influence the road map and shape the schedule. Following the exhibit, Submodules 3-1-1 through 3-1-5 discuss the questions in greater detail.

### **EXHIBIT 3-1 EARLY PLANNING CHECKLIST**

<b>Submodule 3-1-1</b>	<b>Does the unit require a RCRA permit?</b>
<b>Submodule 3-1-2</b>	<b>Does the unit require other environmental permits or approvals?</b>
<b>Submodule 3-1-3</b>	<b>What other State/Federal programs not themselves requiring permits can affect RCRA permitting?</b>
<b>Submodule 3-1-4</b>	<b>What review does the National Environmental Policy Act require?</b>
<b>Submodule 3-1-5</b>	<b>What public participation is needed?</b>

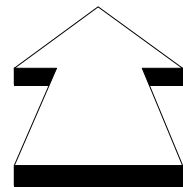
**Submodule 3-1-1:**  
**DOES THE TSD**  
**UNIT REQUIRE A**  
**RCRA PERMIT?**

RCRA requires permits for hazardous waste TSD units [RCRA 3005(a); 42 U.S.C. 6925(a)]. Hence, as DOE formulates plans for any such unit, Department personnel must first evaluate whether the unit will manage hazardous waste (as defined by 40 CFR part 261). To assist with the evaluation, DOE's Office of Environmental Policy and Assistance, RCRA/CERCLA Division (EH-413) (formerly EH-231), has published a guidance manual entitled "Definition of Solid and Hazardous Waste" [DOE/EH-273 (August 1992)] and an Information Brief entitled "Overview of the Identification of Hazardous Waste Under RCRA" (DOE/EH-231-007/1291).

Any unit that will manage hazardous waste as defined by 40 CFR 261 requires a RCRA permit, unless it is exempt

Even if DOE determines that a new or modified waste management unit will be a hazardous waste or RMW TSD unit, a RCRA permit may not be required if the proposed unit is exempt. Therefore, the second step in determining the need for a RCRA permit is evaluating the applicability of exemptions to the anticipated hazardous waste or RMW management activities.

***A comprehensive list of exempt activities was given in the section of the Introduction describing the scope of this guidance document.***



**GO TO  
INTRODUCTION**

If DOE personnel conclude that a planned hazardous waste TSD unit is not exempt, then preparations to apply for a RCRA permit should begin immediately.

**Submodule 3-1-2:**  
**DOES THE UNIT**  
**REQUIRE PERMITS**  
**UNDER**  
**STATUTORY**  
**AUTHORITIES**  
**OTHER THAN**  
**RCRA?**

This submodule summarizes implementing regulations concerning permits or licenses required by the Clean Air Act, the Clean Water Act, and the Atomic Energy Act. Suggestions are provided for complying with these permitting regulations and coordinating such compliance with preparation of the RCRA permit application. However, this information is not intended to be comprehensive. DOE personnel should also consult the applicable law and regulations, as well as pertinent guidance documents issued by DOE's Office of Environmental Policy and

Assistance (EH-41), other DOE organizations, or the responsible regulatory agency.

The Safe Drinking Water Act (SDWA; 42 U.S.C. 300 et seq.) protects drinking water sources by requiring permits for any underground injection that could endanger such sources. Underground injection control (UIC) permits are required before injecting any hazardous wastes. Nevertheless, this submodule does not cover UIC permits because no DOE hazardous waste or RMW underground injection facilities could be identified. Further, under Order DOE 5400.5 and proposed 10 CFR part 834, DOE is actively phasing out subsurface discharges of liquid wastes containing radionuclides.

Other laws identified by 40 CFR 270.3, "Considerations Under Other Federal Law," that may affect RCRA permitting, but do not themselves require permits, are discussed in Submodule 3-1-3.

#### CLEAN AIR ACT

The Clean Air Act (CAA), as amended in 1990, establishes three permitting programs:

- The Title V operating permit program;
- The prevention of significant deterioration (PSD) permit program; and
- The nonattainment area permit program.

Significantly, the CAA permitting programs are not mutually exclusive. Hence, a source of air pollutant emissions may be required to obtain all three permits. EPA and the States have not yet finalized the details of how this will work, but it seems likely that in States that implement all three programs, applicants will ultimately be able to consolidate the permit applications. However, if a State is implementing only one or two of the programs, with EPA implementing the remaining ones, applicants may be forced to file separate applications for the State-issued and EPA-issued permit(s). This is an area of significant recent change, and DOE personnel should consult their regulators.



**Clean Air Act,  
Title V Operating  
Permits**

Among other things, Title V of the Clean Air Act (42 U.S.C. 7661) prohibits operation of an air pollutant emission source without an operating permit. This provision was added to the CAA by the CAA Amendments of 1990. Operating permits are specifically required for the following sources, unless such sources are eligible for exemption [40 CFR 70.3(a)(1)-(5)]:

Sources Required to Obtain Title  
V Operating Permits

- Major sources
- Any source subject to NSPS
- Any source subject to NESHAPs
- Any source subject to acid rain reduction requirements or acid rain emission limitations
- Any other designated source

(1) Any major source as defined by 40 CFR 70.2. Each such source may be comprised of stationary sources that belong to a single major industrial grouping, and that together constitute a major source of HAPs under Section 112 of the CAA, National Emission Standards for Hazardous Air Pollutants; a major stationary source of air pollutants as defined in Section 302 of the CAA, Definitions; or a major stationary source of specified air pollutants in a nonattainment area under part D of Title I of the CAA, Plan Requirements for Nonattainment Areas.

(2) Any source, including an area source (i.e., any stationary source of hazardous air pollutants that is not a major source of hazardous air pollutants), subject to Standards of Performance for New Stationary Sources (NSPS) set forth in 40 CFR part 60;

(3) Any source, including an area source, subject to National Emission Standards for Hazardous Air Pollutants (NESHAPS) set forth in 40 CFR parts 61 and 63;

(4) Any affected source [i.e., a source containing one or more units that are subject to CAA, Title IV (42 U.S.C. 7651) acid rain reduction requirements or acid rain emission limitations]; and

(5) Any source in a source category designated by the EPA Administrator.

At least some DOE hazardous and mixed waste TSD units are likely to require Title V operating permits, because Section 112(b) of the CAA lists about 200 HAPs, including radionuclides. Because of the nature of the materials they will manage, DOE hazardous and mixed waste TSD units may emit one or more of these HAPs. Some units may



even emit enough HAPs and/or other regulated air pollutants (e.g., carbon monoxide, nitrogen oxides, sulfur dioxide, particulate matter, volatile organic compounds, mercury and lead) to be considered major sources.

Approved States will  
implement the Title V  
operating permit program

States are expected to administer the CAA operating permit program. EPA promulgated regulations establishing the minimum elements required for state operating permit programs on July 21, 1992



(57 FR 32250). Permit applications must be submitted to the State where the facility is located within 12 months after the date when an effective permit program has been established [40 CFR 70.5(a)(1)(i)].

Permit applications must be  
filed within 12 months of the  
effective date of the state  
program

If a State fails to submit an appropriate permit program for EPA approval, fails to adequately implement an approved program, or EPA believes the State does not issue adequate Title V permits to individual sources, EPA will implement a Federal operating permit program in that State pursuant to regulations (40 CFR part 71, subpart A) promulgated on July 1, 1996 (61 FR 34202).

### **Clean Air Act, Prevention of Significant Deterioration**

The Prevention of Significant Deterioration (PSD) program imposes a construction permit requirement on new stationary emission sources and modifications to existing stationary sources if [40 CFR 52.21(i)]:

"Major" sources located in  
attainment or unclassifiable  
areas are required to obtain  
PSD permits

- (1) The source or modification is "major" [see 40 CFR 52.21(b)(1)] for any emitted pollutant that is regulated by the Clean Air Act; and
- (2) The source is located in an "attainment" or "unclassifiable" area for the pollutant emitted in "major" quantities (see 40 CFR part 81, subpart C).

The PSD permit applications for some sources require only limited review. Sources for which full review is not required are listed in 40 CFR 52.21(i)(4)-(12). If a DOE hazardous or mixed waste TSD unit requires a PSD permit on the basis of the above criteria, the list should be consulted to verify the extent of review that the PSD permit application must support.

PSD permit, if needed, must be issued before construction starts.

EPA regulations do not establish a filing deadline for PSD permit applications. Nevertheless, the PSD permit, if required, must be issued before construction can begin. Therefore, the application should be submitted sufficiently early to allow for the regulator's completeness and technical reviews, public notice and comment regarding the draft permit, public hearing (if requested), and issuance of the final permit. These activities could take 18 months or longer, depending on the nature of the proposed unit, the extent of public interest, and the work load of the responsible agency staff. DOE personnel should consult the regulator concerning the time that should be allocated for processing a PSD application for new hazardous and mixed waste TSD units.

#### **Clean Air Act, Nonattainment Areas**

Some major fugitive sources are exempt from nonattainment area permitting.

If a new or modified hazardous or mixed waste TSD facility is located in a "nonattainment" area (40 CFR part 81, subpart C), the PSD program does not apply to any pollutant for which the area has been designated nonattainment. Instead, construction of major sources of those air pollutants is prohibited, unless the State issues nonattainment area permits in accordance with a fully approved State Implementation Plan (SIP) (40 CFR 52.24). However, if a source or modification will be major only because fugitive emissions are included in the emission calculation, it is exempt from nonattainment area permitting, unless it falls into one of several categories specified in the regulations [40 CFR 52.24(h)]. It is unlikely that any of the specified exempt categories would encompass a DOE hazardous or mixed waste TSD unit. Nevertheless, if DOE personnel determine that a TSD unit is exempt from nonattainment area permitting because its fugitive emissions cause it to be major, the list specifying exclusions from this permitting exemption should be examined.

As is the case with the PSD permit requirement, EPA has established no nonattainment area permit application deadline. Again, the regulator should be consulted regarding the length of time needed by the agency before the scheduled construction start date to process the application, including time for public notice and comment

on a draft permit, public hearing (if requested), and issuance of the final permit.

**Clean Air Act,  
Summary**

Exhibit 3-2 summarizes the CAA permitting program requirements.

**EXHIBIT 3-2  
CLEAN AIR ACT, SUMMARY**

CAA PERMIT	NATURE OF PERMIT	SOURCES AFFECTED	APPLICATION FILING DEADLINE
<b>TITLE V OPERATING PERMIT</b>	Required for operation regardless of location's attainment status	<ul style="list-style-type: none"> <li>• Major sources</li> <li>• Any source subject to NSPS</li> <li>• Any source subject to NESHAPs</li> <li>• Any source subject to acid rain reduction requirements or acid rain emission limitations</li> <li>• Any other designated source</li> </ul>	Within 12 months of the effective date of the state implementing regulations
<b>PREVENTION OF SIGNIFICANT DETERIORATION (PSD)</b>	Required before construction in "attainment" and "unclassifiable" areas	All stationary sources or source modifications that are: (1) "major" for any regulated pollutant; and (2) located in an "attainment" or "unclassifiable" area	None specified, but processing may require 18 months or longer
<b>NONATTAINMENT AREA</b>	Required before construction in "non-attainment" areas	All stationary sources or source modifications located in areas that are "nonattainment" for one or more regulated pollutants for which the sources or modifications are "major," and that are subject to a fully approved State Implementation Plan (SIP)	None specified. Responsible regulatory agency should be consulted to determine length of time for processing

**CLEAN WATER  
ACT**

**Clean Water Act,  
Section 402,  
National Pollutant  
Discharge  
Elimination System  
(NPDES)**

Section 402 of the Clean Water Act, as amended, establishes the National Pollutant Discharge Elimination System (NPDES) program, requiring permits to discharge "pollutants" from any "point source" into "waters of the United States" [40 CFR 122.1(b)(1)]. In this context, "point source" means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation,

landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff (40 CFR 122.2). With respect to hazardous and mixed waste TSD facilities, some pertinent examples of point sources requiring NPDES permits are listed below. This list is not comprehensive, and DOE personnel responsible for permitting should consult 40 CFR part 122.

Some examples of point sources needing NPDES permits

- (1) Discharges from wastewater treatment facilities.
- (2) Discharges of storm water, including among others, discharges associated with industrial activity [40 CFR 122.1(b)(2)(iv)].
- (3) Any treatment works treating domestic sewage, regardless of whether pollutants will be discharged from a point source by the treatment works, unless all applicable requirements of Section 405(d) of the Clean Water Act (Disposal of Sewage Sludge) are included in another permit issued under RCRA; the Safe Drinking Water Act; the Marine Protection, Research and Sanctuaries Act of 1972; or the Clean Air Act; or an approved state permit program [40 CFR 122.1(b)(3)].

Some point sources are excluded from the requirement to obtain an NPDES permit. Pertinent examples of excluded point source discharges include:

Some examples of exclusions from NPDES permitting requirements

- (1) Discharges of sewage, industrial wastes, or other pollutants into a publicly owned treatment works (POTW) [40 CFR 122.3(c)]. To qualify for this exclusion, the discharger may have to meet pretreatment standards. *NOTE:* This exclusion does not apply to discharges into privately owned or federally owned treatment works.
- (2) Any discharge in compliance with the instructions of an On-Scene Coordinator pursuant to 40 CFR part 300 (National Oil and Hazardous Substances Pollution Contingency Plan) or 33 CFR 153.10(e) (Pollution by Oil and Hazardous Substances) [40 CFR 122.3(d)].

(3) Discharges into a privately owned treatment works, unless a case-by-case determination is made otherwise [40 CFR 122.3(g) and 40 CFR 122.44(m)].

NPDES permit applications must be filed on standard forms

NPDES permit applications must be filed with EPA or the responsible state agency on standard forms provided by the agency. Forms have been developed by EPA covering general facility information for all dischargers (EPA Form 3510-1, often referred to as Form 1), additional information required for dischargers of process wastewater (EPA Form 3510-2C, often referred to as Form 2C), additional information required for dischargers of non-process wastewater (EPA Form 3510-2E, often referred to as Form 2E), additional information required for dischargers of storm water (EPA Form 3510-2F, often referred to as Form 2F), and additional information required for new sources (EPA Form 3510-2D, often referred to as Form 2D).

Form 1 must be filed when an NPDES permit is first sought for a DOE hazardous or mixed waste unit. If storm water is discharged, Form 2F must also be filed. Other forms are added depending on the nature of the expected discharges from the particular facility where the hazardous or mixed waste TSD unit is located. For purposes of evaluating which forms to file, "process wastewater" is water that comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, waste product, or wastewater (40 CFR 122.2). Facilities that do not discharge process wastewater include dischargers of sanitary waste, restaurant or cafeteria wastes, non-contact cooling water, or any other wastewater that is not process wastewater (see EPA Form 3510-2E, item III).

Deadline for NPDES permit application is 180 days *before* discharge begins

Applications should be filed well in advance of the deadline

An application for an NPDES permit for a discharge starting after August 13, 1979, that is not a new source must be filed at least 180 days before the date on which discharge will begin, unless permission for a later filing date has been granted [40 CFR 122.21(c); see 40 CFR 122.29(a) and (b) regarding new source determinations]. However, EPA encourages submitting applications well in advance of the filing deadline. Sufficient time should be provided for the responsible agency to process the application, prepare a draft permit, issue public notice, receive comments, hold a hearing (if requested), and issue

a final permit. The time needed for these activities is highly variable and may extend to several years, depending on the complexity of the proposed unit, the extent of public interest, and the workload of agency personnel. DOE personnel should consult with the responsible agency regarding actual processing time needed.

No filing deadline for new source NPDES permit applications

No filing deadline exists for new source NPDES permit applications. However, if the regulator is EPA, that Agency must fulfill its National Environmental Policy Act (NEPA) responsibilities after the application is filed. Therefore, DOE personnel should consult EPA for advice on when to file so that processing of the application is likely to be completed by a date that supports DOE's anticipated construction schedule.

Consult with EPA or the responsible state agency

Similarly, DOE personnel should consult the responsible state agency for advice on when to file in States to which EPA has delegated NPDES permitting authority. While issuance of an NPDES permit by a State under a delegated program is not a Federal action subject to NEPA, state laws may impose NEPA-Like responsibilities on the responsible state agency.



**Clean Water Act,  
Section 404,  
Dredge and Fill**

CWA §404 permits are issued by the U.S. Army Corps of Engineers

The Clean Water Act, Section 404 program requires a permit for placing dredged or fill material into waters of the United States, including areas designated as wetlands. Certain placements of dredged or fill material are permitted under "nationwide" permits (see 33 CFR part 330), while others may be authorized under "regional" permits. Any placement of dredged or fill material not either exempt (see 33 CFR 323.4) or authorized by a nationwide or regional permit must obtain a case-by-case permit. The Section 404 permitting program is administered by the U.S. Army Corps of Engineers.

Seek Corps concurrence on the need for a CWA §404 permit

If construction of a TSD facility will involve dredging or filling activities, DOE personnel should evaluate whether a Section 404 permit is required and request concurrence on that determination from the U. S. Army Corps of Engineers.

Other Corps of Engineers approvals may also be required

DOE personnel should consider whether approval from the Corps might also be required under Section 9 of the Rivers and Harbors Act of 1899 for building dams and dikes in navigable waters of the United States (see 33 CFR part 321), or under Section 10 of the Rivers and Harbors Act of 1899 for placing structures or conducting work that would either be in or affect navigable waters of the United States (see 33 CFR part 322). However, few DOE hazardous waste or RMW TSD units are expected to require these approvals.

**ATOMIC ENERGY  
ACT OF 1954**

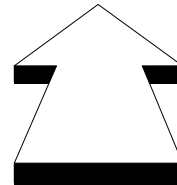
Most DOE facilities are exempt from NRC licensing under the AEA.

Under authority granted by the Atomic Energy Act of 1954 (AEA), as amended, the U.S. Nuclear Regulatory Commission (NRC) licenses and regulates civilian use of nuclear material to protect health, safety, and the environment. The AEA excludes most DOE facilities from NRC regulation [AEA §110(a); 42 U.S.C. 2140(a)]. However, the Energy Reorganization Act of 1974 [P.L. 93-438 (1974); 42 U.S.C. §5842] mandated that NRC would regulate a few, very specific DOE facilities, including any demonstration liquid metal fast breeder reactor, any other demonstration nuclear reactor, any facility for receiving and storing high-level



radioactive wastes, and any retrievable surface storage facility for high-level radioactive wastes. Most DOE mixed waste TSD units will not be among these types of facilities and, therefore, will not require NRC licenses. Instead, these units will be governed by DOE Orders. For this reason, no further information is provided here concerning NRC license applications.

***Additional information on potentially applicable DOE Orders is provided in Chapter 7, Integration with Other Laws.***



**GO TO  
CHAPTER 7**

Pertinent requirements for obtaining NRC licenses for the few DOE mixed waste TSD units that require them are stipulated in 10 CFR part 50, "Domestic Licensing of Production and Utilization Facilities;" 10 CFR part 60, "Disposal of High-Level Radioactive Wastes in Geologic Repositories;" and 10 CFR part 72, "Licensing Requirements for the Independent Storage of Spent Nuclear Fuel and High-level Radioactive Wastes."

For the purpose of licensing of storage facilities, the NRC defines the term "high-level radioactive waste" as (1) the highly radioactive material resulting from the reprocessing of spent nuclear fuel, including liquid waste produced directly in reprocessing and any solid material derived from such liquid waste that contains fission products in sufficient concentrations; and (2) other highly radioactive material that the NRC determines by rule requires permanent isolation (10 CFR 72.3).

## **STATE LAWS**

States can be authorized to implement permitting programs.

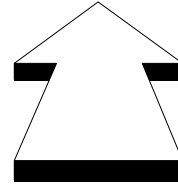
States can be authorized by EPA to implement the Clean Air Act Title V operating permit program, Clean Air Act PSD permit program, Clean Air Act nonattainment area permit program, Clean Water Act NPDES permit program, and RCRA TSD facility permit program. If a DOE facility requiring any of these permits for a hazardous waste TSD unit is located in a State to which authority for a portion, or all, of any of these programs has been





delegated, then DOE must seek the required permit(s) from the authorized State. If only a portion of a program has been delegated, it may be necessary for DOE to obtain the permit for the undelegated portion of the program from EPA.

***Chapter 6, Federal/State Authority and Implementation, provides additional information concerning the interface between Federal and state authority under RCRA.***



**GO TO  
CHAPTER 6**

States might also have separate permitting programs under state law.

States also sometimes enact independent state laws requiring that separate state permits be obtained for hazardous waste TSD units. Because such requirements vary from State to State, no attempt is made here to identify States where separate permits are required. DOE personnel should determine on a case-by-case basis whether any separate state permits are needed for a planned hazardous waste TSD unit.

**Submodule 3-1-3:  
WHAT OTHER  
FEDERAL  
PROGRAMS THAT  
DO NOT REQUIRE  
PERMITS CAN  
AFFECT RCRA  
PERMITTING?**

The following paragraphs briefly suggest steps for carrying out the requirements of the major Federal laws listed in 40 CFR 270.3, "Considerations under Federal Law," and incorporating the results into the RCRA permit application. The challenge for DOE personnel responsible for obtaining RCRA permits is to ensure that consideration of the requirements of each of these laws has been documented appropriately, either in the RCRA permit application or otherwise, so that issuance of a RCRA permit will not be delayed. This discussion is not intended to be comprehensive, and DOE personnel should consult the other laws covered and their implementing regulations, and to contact responsible regulatory agency personnel to ensure compliance.

The following laws are covered in this section:

- The Wild and Scenic Rivers Act (16 U.S.C. 1273, et seq.)
- The National Historic Preservation Act of 1966 (16 U.S.C. 470, et seq.)

- The Endangered Species Act (16 U.S.C. 1531, et seq.)
- The Coastal Zone Management Act [(16 U.S.C. 1451, et seq.)
- The Fish and Wildlife Coordination Act (16 U.S.C. 661, et seq.)

#### **WILD AND SCENIC RIVERS ACT**

The Wild and Scenic Rivers Act is designed to preserve and protect certain selected rivers and their immediate environments on the basis of their scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values. The Act lists specific streams and rivers that have been designated by Congress for protection and authorizes States to adopt similar lists. Section 7 of the Act prohibits any Federal agency from assisting, by licensing or otherwise, the construction of any water resources project that would have a direct adverse effect on the values for which a national wild and scenic river was established.

The term "water resources project" is not defined; however, it seems unlikely that many DOE hazardous waste or RMW TSD units would be considered water resources projects. Nevertheless, DOE personnel should take the following steps during preparation of a RCRA permit application to ensure that the permit is not delayed by considerations under the Wild and Scenic Rivers Act:

1. As soon as the project is conceived, consult the statutory listing of wild and scenic rivers to determine whether the proposed project will be located on, or in the watershed of, a listed river.
2. If the proposed project is located on, or in the watershed of, a listed river, DOE personnel should contact the Department of the Interior (DOI) [i.e., National Park Service (NPS)]. The purpose of the contact should be to identify responsible personnel, inform them of project plans, and convey DOE's interpretation of the applicability, if any, of the Wild and Scenic Rivers Act to the project.
3. If the project is located on, or in the watershed of, a listed river and the Wild and Scenic Rivers Act

applies, DOE should evaluate whether the project has the potential to directly and adversely affect the values for which the river was listed.<sup>1</sup> If the answer is yes, DOE should suggest and solicit feedback from the responsible NPS personnel on project features to mitigate the effect.

All DOE evaluations of the effects of the project on the listed river, as well as the effectiveness of mitigation measures, and interactions with the NPS personnel should be documented, and, if appropriate, copies of that documentation should be appended to the RCRA permit application.

**NATIONAL  
HISTORIC  
PRESERVATION  
ACT**

Section 106 of the National Historic Preservation Act requires a Federal agency with jurisdiction over a Federal, federally assisted, or federally licensed undertaking to: (1) consider the effects of the undertaking on properties included in or eligible for inclusion in the *National Register of Historic Places*; and (2) give the Advisory Council on Historic Preservation a reasonable opportunity to comment on the undertaking. Regulations implementing Section 106 have been adopted as 36 CFR part 800, "Protection of Historic and Cultural Properties."

To ensure compliance with the National Historic Preservation Act, DOE personnel should take the following steps as soon as a plan for constructing or modifying a TSD unit or facility is conceived:

1. Determine whether any known historic properties are located in the area that will be affected by the proposed project. Pursuant to 36 CFR 800.4(a), this determination should be accomplished by:
  - a. Contacting the office of the State Historic Preservation Officer (SHPO), explaining the

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<sup>1</sup> Listing of a wild and scenic river requires a determination of eligibility by the NPS). The eligibility determination is made on the basis of an eligibility report prepared by the NPS and subjected to public review and comment via a notice in the *Federal Register*. The values for which the river was listed can be determined by reviewing the pertinent *Federal Register* notices and/or the eligibility report.

location and nature of the project, and requesting information on any recorded archeological and historic sites within the affected area;

- b. Performing a literature review and records search to identify any recorded archeological and historic sites within the affected area; and
  - c. Soliciting input from local governments, Indian tribes, public and private organizations, and others likely to have knowledge of or concerns with historic properties in the area.
- 2. Conduct a field survey of the affected area to identify previously unrecorded historic properties and collect enough information to evaluate the eligibility of any such properties for the *National Register of Historic Places* [36 CFR 800.4(b)].
  - 3. In consultation with the SHPO, evaluate the historical significance of any historic properties (both previously known and newly identified) located within the affected area and take appropriate action regarding listing such properties on the National Register [36 CFR 800.4(c)].
  - 4. If historic properties will be affected, consult with the SHPO to identify methods for avoiding or mitigating the effect (36 CFR 800.5).
  - 5. Document all information collected, evaluations made, and interactions with the SHPO and append that documentation to the RCRA permit application.

**ENDANGERED  
SPECIES ACT**

Section 7 of the Endangered Species Act, as amended, requires Federal agencies to ensure, in consultation with the Secretary of the Interior [U.S. Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS)], that their actions are not likely to jeopardize the continued existence of any endangered species or threatened

species, or destroy the critical habitat of such species [16 U.S.C. 1536(a)(2)].

To ensure that the requirements of the Endangered Species Act are met, DOE personnel should take the following steps as soon as possible after deciding to plan any project involving construction or modification of a hazardous waste TSD unit or facility:

1. Contact the appropriate office of the USFWS or the NMFS, as well as the appropriate state wildlife agency, and request information concerning the potential occurrence in the vicinity to be affected by the proposed project of any federally listed and state listed endangered and threatened species, respectively [16 U.S.C. 1536(c)].
2. If the USFWS or the NMFS identifies any federally listed threatened or endangered species with the potential to occur within the vicinity of the proposed project, request a consultation with the USFWS or the NMFS [16 U.S.C. 1536(a)(2)].
3. Consult with the USFWS or the NMFS in scoping and preparing a biological assessment to evaluate whether any species potentially occurring within the vicinity of the proposed project are likely to be affected by the project [16 U.S.C. 1536(c)].
4. Submit the biological assessment to the USFWS or the NMFS and request a determination concerning the project (i.e., a determination of the project's impact, mitigative measures considered reasonable, and terms and conditions for implementing the mitigative measures) [16 U.S.C. 1536(b)].
5. Document all interactions with the USFWS or the NMFS and append such documentation, along with the biological assessment, if appropriate, to the RCRA permit application.

**COASTAL ZONE  
MANAGEMENT ACT**

The Coastal Zone Management Act is designed to preserve, protect, develop, and where possible, to restore or enhance, the resources of the nation's coastal zone [16 U.S.C. 1452(1)]. The Act requires Federal agencies that undertake development projects affecting the coastal zone to ensure that each project is, to the maximum extent practicable, consistent with the enforceable policies of the responsible State [16 U.S.C. 1456(c)(2)].

Implementing regulations have been adopted as 15 CFR part 930, subpart C, "Consistency for Federal Projects." Under such regulations, Federal agencies must (as soon as possible but at least 90 days before final approval of the proposed project) provide the State with a determination of consistency for any activity directly affecting the coastal zone [15 CFR 930.34(a)].

The Act also requires applicants for Federal permits to supply with the permit application a certification that the proposed project will comply with the enforceable policies of the State [16 U.S.C. 1456(c)(3)(A)]. The requirement for certification of compliance and consistency is implemented by 15 CFR part 930, subpart D, "Consistency for Activities Requiring a Federal License or Permit." Such certification must consist of the following statement [15 CFR 930.57(b)] supported by data and information specified in 15 CFR 930.58:

The proposed activity complies with (name of State) approved coastal management program and will be conducted in a manner consistent with such program.

Upon receiving a certification of consistency, the responsible state agency must provide public notice and an opportunity for public hearing (15 CFR part 930.61 and 930.62). No license or permit shall be granted by the Federal agency until the State or its designated agency has concurred with the applicant's certification or until, by the State's failure to act, the concurrence is conclusively presumed, unless the Secretary of Commerce, on his/her own initiative or upon appeal by the applicant, finds, after

providing a reasonable opportunity for detailed comments from the Federal agency involved and from the State, that the activity is consistent with the objectives of the Coastal Zone Management Act or is otherwise necessary in the interest of national security [16 U.S.C. 1456(c)(3)(A)].

On the basis of the above requirements, if DOE plans to construct a hazardous waste or RMW treatment facility that could affect the coastal zone and requires a RCRA permit, the Coastal Zone Management Act requires the permit application to include a certification from DOE that the project will comply with the enforceable policies of the State in which the coastal zone will be affected [16 U.S.C. 1456(c)(2)]. If a hazardous waste or RMW treatment facility is planned that could affect the coastal zone but would not require a RCRA permit, then DOE must file a determination of consistency with the responsible State pursuant to 16 U.S.C. 1456(c)(3)(A).

In either case, DOE personnel should follow these steps in dealings with the responsible state agency:

1. As early as possible after conceiving of the project, determine if the State in which land or water use, or natural resources that would be affected by the project are located has an approved coastal zone management program.
2. Review the State's approved coastal zone management program and evaluate whether the proposed project can comply with that program.
3. Contact a representative of the state agency responsible for implementation of the coastal zone management program. Discuss DOE's proposed project with the state agency representative and clarify the enforceable policies of the State's approved program with which the project must comply. Goals of the discussion should be to (1) inform state decision makers of the project so they will be prepared when asked (pursuant to the Coastal Zone Management Act [16 U.S.C. 1456(c)(3)(A)]) to concur with DOE's certification of compliance (15 CFR 930.60); and (2) identify any potential inconsistencies between the project and

the State's approved coastal zone management program so that such inconsistencies can be addressed or avoided.

4. If inconsistencies between the project and the State's approved coastal zone management program are identified, work with the responsible state personnel to establish conditions that if met would remove the inconsistency.
5. Document all interactions with responsible state personnel and append such documentation to the RCRA permit application, if appropriate.

**FISH AND  
WILDLIFE  
COORDINATION  
ACT**

Section 2 of the Fish and Wildlife Coordination Act requires Federal departments and agencies to consult with the USFWS and the appropriate state wildlife agency before proposing or approving the impounding, controlling, or diverting of any stream or other body of water [16 U.S.C. 662(a)]. It seems unlikely that DOE will propose impounding, controlling, or diverting a body of water in association with construction or modification of a hazardous waste or RMW TSD facility. Nevertheless, should such action occur, DOE personnel should take the following steps to ensure compliance with the Fish and Wildlife Coordination Act:

1. Prepare a brief description of the proposed project, explaining the proposed impoundment, controls, or diversion of the affected body of water. The description should also include aspects of the project design that will prevent loss of wildlife resources, or develop or improve such resources.
2. Discuss the description with the appropriate offices of the USFWS and the state wildlife agency, either in a meeting or on the telephone, and submit written materials, as requested.
3. Consult with the USFWS and the state wildlife agency personnel concerning recommendations they may have for enhancing the wildlife resource improvement and loss prevention plans.



4. Document all interactions with USFWS and state wildlife agency and append such documentation to the RCRA permit application, if appropriate.

**Submodule 3-1-4:**  
**WHAT REVIEW  
DOES THE  
NATIONAL  
ENVIRONMENTAL  
POLICY ACT  
REQUIRE?**

NEPA requires that a Federal agency prepare an EIS before taking any "major federal action significantly affecting the quality of the human environment" [NEPA §102(C), 42 U.S.C. 4332(C)]. To guide compliance, many Federal agencies have adopted NEPA implementing regulations. DOE's implementing regulations are located in 10 CFR part 1021.

For any RCRA hazardous or mixed waste TSD facility, the purpose of DOE's NEPA review is to inform decisionmaking on whether and how to site, construct, and operate the facility. Therefore, NEPA review should have been completed before any decision to proceed with permitting of a particular unit is made. For that reason, this guidance document assumes that any required NEPA review will not be performed in the same time frame as RCRA permitting activities. Notwithstanding, if it appears that RCRA permitting activities may be needed while a pertinent NEPA review is underway, responsible DOE or DOE contractor personnel should consider the limitations on actions during the NEPA process given in 40 CFR 1506.1. Also, for guidance on this or any other matter related to NEPA requirements, including the level of NEPA review, DOE or DOE contractor personnel responsible for RCRA permitting should consult with the appropriate NEPA Compliance Officer or DOE's Office of NEPA Policy and Assistance.

**Submodule 3-1-5:**  
**WHAT PUBLIC  
PARTICIPATION IS  
NEEDED?**

Any siting, construction or expansion, or operation of a hazardous waste TSD unit that requires a RCRA permit, a PSD permit, or an NPDES permit is subject to public participation requirements specified by EPA's Procedures for Decisionmaking (40 CFR part 124). NEPA or CERCLA public participation requirements may also apply. The challenge for DOE personnel responsible for permitting RCRA hazardous waste TSD facilities is to devise a plan for public participation that incorporates all pertinent requirements.

Almost all DOE sites already have a designated public liaison. Therefore, DOE personnel responsible for permitting of a hazardous or mixed waste TSD unit should consult with the designated public liaison to develop the most appropriate plan for public participation on a case-by-case basis. At a minimum, the plan must address EPA's RCRA public participation mandates which are summarized by Exhibit 3-3. For additional information on public participation the guidance documents listed after the Exhibit may be consulted.

**EXHIBT 3 - 3**  
**PUBLIC PARTICIPATION REQUIREMENTS FOR OBTAINING RCRA PERMITS**

Event	Requirement [a] [b]
Prepare RCRA Part B application	<ul style="list-style-type: none"> <li>• Hold at least one pre-application public meeting with 30 days advance notice [40 CFR 124.31(b) and (d)]</li> <li>• EPA assesses need for information repository [40 CFR 124.33(b)]</li> <li>• Establish information repository if notified by EPA to do so [40 CFR 124.33(b)]</li> <li>• Notify public that information repository has been established [40 CFR 124.33(e)]</li> <li>• Update repository information as appropriate [40 CFR 124.33(f)]</li> </ul>
Submit RCRA Part B permit application	<ul style="list-style-type: none"> <li>• EPA notifies public and state and local governments that application is available [40 CFR 124.32(b)]</li> <li>• EPA places application in an accessible location [40 CFR 124.32(c)]</li> </ul>
EPA issues draft RCRA permit or Notice of Intent to Deny	<ul style="list-style-type: none"> <li>• EPA publishes fact sheet/statement of basis (40 CFR 124.7 and 124.8)</li> <li>• EPA issues public notice of permit action and 45-day opportunity for comment and hearing requests (40 CFR 124.10)</li> <li>• EPA holds public hearing (if requested), with 30-days advance notice (40 CFR 124.12)</li> </ul>
EPA issues final RCRA permit, denial of permit, or permit modification	<ul style="list-style-type: none"> <li>• EPA issues notice of decision (40 CFR 124.15)</li> <li>• EPA responds to public comments (40 CFR 124.17)</li> </ul>

**NOTES:**

- a. Required public involvement activities are based on Federal RCRA regulations. If the RCRA program is administered by a State, the public involvement requirements may be different.
- b. Unless otherwise indicated, DOE (as the applicant) completes the listed action. EPA recommends that applicants tailor actions to fit the diversity, character and culture of the affected community [EPA RCRA Public Participation Manual, p.3-2 (9/96)].

Public Participation in  
Environmental  
Restoration Activities  
(November 1991)

In 1991, guidance on public participation in decision-making associated with environmental restoration and waste management, particularly at sites subject to public participation requirements under CERCLA as amended by the 1986 Superfund Amendments and Reauthorization Act (SARA) was published by DOE's Office of Environmental Policy and Assistance, RCRA/CERCLA Division (EH-413, formerly EH-231). The guidance is entitled *Public Participation in Environmental Restoration Activities* [DOE/EH-0221 (November 1991)]. The document provides an overview of DOE's public participation program and summarizes the statutory and then-applicable regulatory requirements for public participation found in CERCLA, RCRA (corrective action) and NEPA. It further discusses the integration of CERCLA/RCRA, CERCLA/NEPA and State/Federal public participation standards under the regulations as they existed at that time. Although the emphasis is on cleanup actions, the guidance provides useful instructions that can also be applied to RCRA permitting situations.

Public participation guidance written for DOE's environmental restoration activities is instructive for RCRA permitting

Public Participation  
Policy for Environmental  
Restoration and Waste  
Management  
(October 1992)

In October 1992, DOE's Assistant Secretary for Environmental Management (EM) (formerly Assistant Secretary for Environmental Restoration and Waste Management) issued a statement of policy on public participation, declaring that the EM program's overall public participation goal is "to create an open and accessible decisionmaking process that results in decisions that are technically and economically feasible, environmentally sound, health and safety conscious, address public values and concerns, and can be implemented" ["Public Participation Policy for Environmental Restoration and Waste Management, U.S. Department of Energy" (October 1992)]. The policy lays out EM's public participation goal and objectives, includes definitions, discusses the need for public participation, and delineates roles and responsibilities of EM components, other DOE offices, and outside organizations.

Public Participation  
Guidance for  
Environmental  
Restoration and Waste  
Management  
(March 1993)

The policy statement was followed by the issuance of "Public Participation Guidance for Environmental Restoration and Waste Management" (March 1993), which emphasizes public participation planning. It advocates the establishment of EM

public participation planning teams at DOE Headquarters and at each Field Office or site (as appropriate) to plan and implement a coherent, comprehensive, coordinated EM public participation program for each EM site. It also describes a model for the planning process and the resultant public participation plans that will document EM's approach to involving the public in its program.

EM Public Participation  
Desk Reference  
(1994)

For easy reference, the EM Public Participation Policy Statement and Guidance were republished, along with the "EM Headquarters Public Participation Implementation Plan" in 1994 in the "EM Public Participation Desk Reference."

Site-Specific Advisory  
Board Guidance - Final"  
(January 1996)

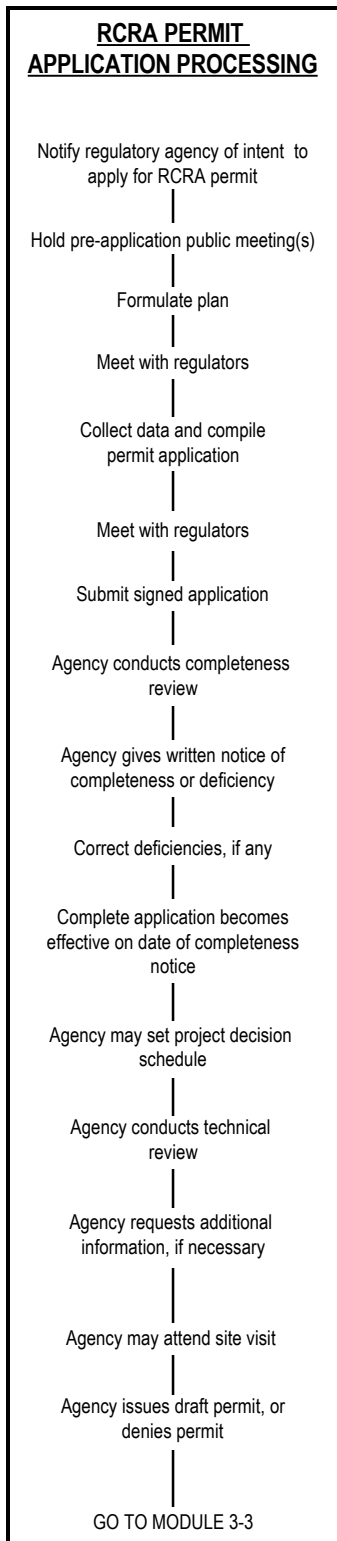
The Federal Facilities Environmental Restoration Dialogue Committee (Keystone Committee) issued an Interim Report in February 1993, specifically recommending the creation of site-specific advisory boards (SSABs) as a means of involving stakeholders more directly in cleanup decisions. As a result of that report and several successes with site advisory groups, EM has embraced the idea of SSABs. Hence, SSABs are being established at major EM sites throughout the DOE complex. Also, a guidance document focusing on SSABs has been issued [DOE Office of Environmental Management, *Site-Specific Advisory Board Guidance - Final* (January 1996)]. DOE personnel responsible for obtaining RCRA permits should coordinate with these EM public participation programs as much as appropriate.

RCRA Public  
Participation Manual  
(September 1996)

In December 1995, EPA modified its RCRA regulatory requirements to include public participation earlier in the permitting process, expand public notice for significant events, and enhance the exchange of permitting information (see 60 FR 63417, December 11, 1995). Subsequently, a manual was developed which replaced and updated earlier EPA guidance on public participation [see *RCRA Public Participation Manual*, 1996 Edition (EPA530-R-96-007, September 1996)]. The *RCRA Public Participation Manual* reviews regulatory requirements and provides policy guidance to help implement the RCRA program. The 1996 *Manual* is intended to explain how public participation works in the RCRA

permitting process and how citizens, regulators, and industry can cooperate to make it work better. As such, the 1996 *Manual* is unlike earlier EPA guidance manuals on public participation, which were limited to outlining public participation procedures and the role of EPA and state program staff.

## MODULE 3-2: RCRA Permit Application Processing



This module discusses RCRA permit application processing and includes suggestions for interacting with the responsible regulatory agency before and during agency processing of the application. Information concerning the steps mandated by 40 CFR parts 124 and 270 for processing a RCRA permit application are also covered by this module. Finally, consolidated processing of RCRA, NPDES, and PSD permits is discussed.

### **Submodule 3-2-1:** **RCRA PERMIT APPLICATION PROCESSING**

If DOE plans a hazardous waste or RMW TSD unit requiring a RCRA permit, the first step will be notifying the responsible regulatory agency of intent to seek a RCRA permit. Next, at least one pre-application public meeting must be held, unless the unit qualifies for an emergency permit. Emergency permits do not require public participation.

The regulations do not mandate a format or specified content for the pre-application public meeting. The purpose of the meeting is to share information and concerns. DOE personnel responsible for RCRA permitting should consult the designated DOE public liaison before choosing a format. EPA recommends that regardless of format, the following topics be addressed at the meeting [*EPA RCRA Public Participation Manual*, 1996 Edition (EPA530-R-96-007, September 1996) p. 3-5]:

Topics for discussion at the  
Pre-application meeting

- Type of facility being planned;
- Location of facility;
- General processes involved and types of waste to be generated and managed; and
- Extent to which waste minimization and pollution prevention may supplement or replace waste treatment needs.

Public Notice of the  
Pre-application meeting

At some DOE sites, it may be appropriate to hold more than one pre-application meeting; the decision to do so should be made on a site-specific basis. Public notice of the one required pre-application meeting must be given at least 30 days before the date of the meeting in three ways [40 CFR 124.31(d)]:

- A newspaper display advertisement;
- A visible and accessible sign; and
- A broadcast media announcement.

A copy of the newspaper notice must be provided to the responsible regulatory agency, but no official documentation of the notice must be submitted. Instead, the documentation must be maintained at the site and be made available upon request.

While the format of the notice is flexible, in all media the notice must include the following [40 CFR 124.31(d)(2)]:

- The date, time, and location of the meeting;
- The purpose of the meeting;
- A brief description of the facility and proposed operations, including the address or a map of the facility location;
- A statement encouraging persons needing special access to contact the facility at least 72 hours before the meeting; and
- The name, address, and telephone number of a contact person.

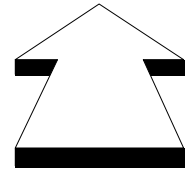
Preparation of the RCRA  
permit application

The next step following the pre-application public meeting is to prepare a permit application, which has two parts. Part A provides basic information about the owner, operator, volumes and types of wastes managed, and facility at which the hazardous or mixed waste TSD units are, or will be, located. Part B provides details about the facility, the TSD processes



at the facility that involve the permitted units, the site hydrologic characteristics, the facility's operational plans (including hazard prevention plan, contingency plan, and personnel training plan), the closure and post-closure plans, the corrective action plan (if any) and the facility's compliance with environmental laws other than RCRA.

***For more information on the content of Parts A and B of the application for a RCRA permit, go to Module 2-2, Information Required in a RCRA Permit Application.***



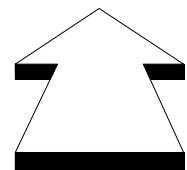
**GO TO Module 2-2**

Part A of the RCRA permit application consists of a completed EPA Form 8700-23, "RCRA Part A Permit Application" (see Appendix I), or an equivalent state form, and the accompanying documents needed to portray or convey the information requested on the form.

For a new hazardous waste TSD facility, Parts A and B of the RCRA permit application are filed together [40 CFR 270.10(d)].

If a hazardous waste TSD unit is being added to an existing facility that already holds a RCRA TSD permit, then a permit modification request is required [40 CFR 270.41(a)(1)]. The modification request must include an update of the previously filed Part A application for the existing facility and a Part B application covering the new unit [40 CFR 270.42(c)].

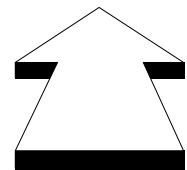
***For more information on modifying a RCRA permit, go to Chapter 4, RCRA Permit Modifications.***



**GO Chapter 4**

Facilities that are in existence on the effective date of a law or regulation that reclassifies the materials they manage as hazardous waste also must file Part A applications [40 CFR 270.70(a)(2)]. Part B need not be filed for such facilities until the responsible regulatory agency requests it [40 CFR 270.10(a)].

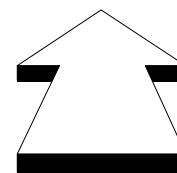
***For more information on permitting requirements for facilities that already exist when materials they manage are***



**GO TO CHAPTER 1**

***reclassified as hazardous waste, go to Chapter 1, Interim Status.***

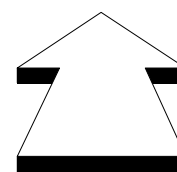
***For more information on the requirements for interim status units to file Part B applications, go to Module 1-2, Part B Permit Application Deadlines and Loss of Interim Status (LOIS).***



**GO TO Module 1-2**

Part B of the RCRA permit application has no pre-printed form. Instead, applicants must collect and analyze data, conduct studies, and prepare plans, as necessary, to meet the information requirements of 40 CFR 270.14 through 270.26. The results must then be presented either in a facility-specific format or in a State- or EPA Region-suggested format (if available).

***For more information on the content of Part B of the RCRA permit application, go to Module 2-2, Information Required in a RCRA Permit Application.***



**GO TO Module 2-2**

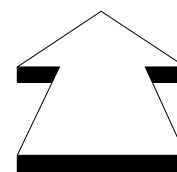
The format and content of the RCRA Part B application should be chosen to simplify completeness and technical adequacy determinations.

The most important goal in choosing a facility-specific format for Part B of the RCRA permit application should be to make evaluating the completeness and technical adequacy of the document as easy as possible for regulatory personnel.

Develop a plan and schedule.

DOE personnel should use the information presented in Chapter 2 to develop a plan and schedule for collecting data and producing the RCRA permit application so that a permit can be obtained within any applicable deadlines.

***For more information on permit application deadlines, go to Module 2-1, Permit Application Deadlines for New Facilities.***

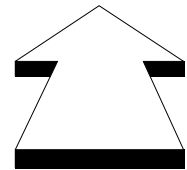


**GO TO Module 2-1**

Development of the plan should involve identifying various studies that will be required to support not only a RCRA permit application, but other permit applications

as well. If warranted, additional time should be allotted for public participation.

***For more information on requirements for public participation, go to Submodule 3-1-5, What Public Participation is Needed?***



**GO TO  
Submodule 3-1-5**

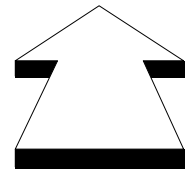
Hold a kickoff meeting with regulators.

The plan, including the scope of each study, and schedule should be presented to EPA or the authorized State in an initial informational kickoff meeting as early as possible. The responsible regulatory agency should be asked for informal concurrence with the plan. While concurrence may not be given, important feedback can be obtained.

In some States, the State will have responsibility for only a portion of the RCRA permitting program. In such States, EPA will continue to play a significant role in RCRA permitting. If DOE locates a hazardous waste or RMW TSD unit in such a State, the kickoff meeting should involve both State and EPA regulators. If a joint meeting is not possible, then a meeting with each agency is advisable, and concurrence with the plan should be sought from both agencies.



***For more information on Federal/State RCRA permitting authority, go to Chapter 6, Federal/State Authority and Implementation.***



**GO TO CHAPTER 6**

After obtaining regulator concurrence with the permitting plan (if possible), DOE must collect data and prepare the permit application.

In the case of RMW TSD units, unless the responsible regulatory agency directs otherwise, DOE personnel responsible for RCRA permitting should prepare RCRA permit applications to address source, special nuclear, and byproduct materials contained in RMW only as necessary to clarify and justify management practices for RMW that differ from practices required or



recommended by EPA for other hazardous wastes. Examples of RMW management practices that might justifiably differ from those EPA requires for nonradioactive hazardous wastes include RMW inspection programs and RMW sampling and analysis programs that must comply with the principle of keeping radiation exposures “as low as reasonably achievable” (ALARA).

An authorized person must sign the RCRA permit application

When the application is ready to submit, it must be signed by an authorized individual [40 CFR 270.11(a)(3)] and submitted to the responsible appropriate regulatory agency (40 CFR 270.1). If possible, DOE should arrange a meeting with regulatory personnel to deliver the application and discuss the proposed unit.

The responsible regulatory agency reviews the application for completeness

Upon receiving the permit application, the responsible regulatory agency first reviews the application for "completeness." To be judged complete, the application must address all pertinent information requirements of 40 CFR parts 264 and 270 for the type of unit being proposed. Some EPA Regions have developed completeness checklists for use by Agency reviewers. An example of such a checklist developed by EPA Headquarters is provided in Appendix II.

The regulations require that the responsible regulatory agency finish the completeness determination for a new facility permit application (Parts A and B) within 30 days after receipt [40 CFR 124.3(c)]. For an application to modify an existing permit, the agency has up to 60 days to finish the completeness review (Part B) [40 CFR 124.3(c)].

If the application is not complete, a Notice of Deficiency (NOD) will be issued

If the application is judged complete, the regulatory agency will notify DOE in writing and proceed with its technical review. If the application is not complete, a Notice of Deficiency (NOD) must be issued listing all missing information [40 CFR 124.3(c)]. DOE must either correct the deficiencies, or the permit could be denied and appropriate enforcement actions taken under statutory provisions, including RCRA §3008 [40 CFR 124.3(d)].

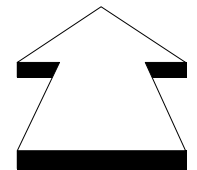
If deficiencies are not corrected, the permit could be denied and enforcement action could result

DOE personnel should openly communicate with the responsible regulatory agency during the completeness review process. If DOE disputes any deficiency listed by the regulatory agency in a NOD, the dispute should be informally resolved, if possible.

If the responsible agency denies, as a result of uncorrected application deficiencies, a permit application for a new hazardous waste or RMW TSD facility, or for modification of an existing permitted facility, reapplication is still possible. To reapply, the applicant must submit a new permit application, which will be reviewed on its own merits for completeness.

If the responsible agency denies, as a result of uncorrected application deficiencies, a permit application seeking a final permit for an interim status facility, interim status will be terminated and closure initiated.

***For more information on termination of and closure during interim status, go to Module 1-1, Eligibility for Interim Status, and Module 1-2, Part B Permit Application Deadlines and Loss of Interim Status (LOIS).***



**GO TO Modules  
1-1 and 1-2**

The permit application becomes effective on the date notice of its completeness is issued

The permit application becomes effective on the date the responsible regulatory agency issues notice of the application's completeness [40 CFR 124.3(f)]. The regulations require the responsible agency to provide a project decision schedule no later than the permit application's effective date. The decision schedule must outline target dates by which the agency intends to [40 CFR 124.3(g)]:

- Complete a draft permit;
- Provide public notice; and
- Close public comment, including any public hearing.

The responsible regulatory agency is supposed to provide a project decision schedule, but seldom does

As a practical matter, responsible regulatory agencies seldom provide a project decision schedule. Therefore, if DOE wants a schedule, the Department should consider filing a written request. However, even then, the responsible agency may not oblige.

The responsible regulatory agency may request additional information during technical review

After the permit application is "complete," the responsible regulatory agency will perform a technical review, which serves as the basis for preparing a draft permit. During this review, the regulatory agency may request additional information to clarify, modify, or supplement the permit application. However, such requests do not render the application incomplete [40 CFR 124.3(c)].

Site visits can be helpful

A site visit during the technical review can be very helpful to permit writers. DOE personnel should offer such visits to the responsible regulatory agency early in the technical review period. Whether or not DOE offers a site visit, the regulations require DOE to schedule such a visit if the responsible agency notifies DOE that it is necessary [40 CFR 124.3(e)].

Responsible regulatory agency may issue a draft permit, or deny the permit application

As the final step of processing a RCRA permit application, the responsible regulatory agency will either issue a draft permit or deny the permit application. However, if the application proposes constructing more than one hazardous waste TSD unit, the responsible agency is allowed to act on the units separately. Therefore, in such circumstances, the regulatory agency may issue a draft permit for one or more proposed units, while simultaneously denying the permit application for the remaining proposed units.

If the permit application covers some, but not all, interim status units at an existing facility, issuance of a permit, or denial of the application, will not affect the interim status of other units at the facility for which permits have not yet been issued or denied [40 CFR 270.1(c)(4)].

#### **Submodule 3-2-2: CONSOLIDATION OF PERMIT APPLICATION PROCESSING**

Decide whether consolidated processing would be advantageous

Under certain conditions, EPA regulations allow the responsible regulatory agency to consolidate processing of a facility's applications for permits under more than one statute. The permit application reviews that may be consolidated include RCRA TSD permit, NPDES permit, Underground Injection Control permit, and PSD permit. DOE personnel responsible for obtaining RCRA permits should determine whether this consolidation of processing is available for any hazardous or RMW unit requiring more than one of these permits, and whether such consolidation would be advantageous.

DOE may recommend consolidated processing

If one agency (either EPA or an authorized State) is responsible for issuing all of the permits eligible for consolidation, the responsible agency has discretion to consolidate the processing or not [40 CFR 124.4(c)(1)]. If EPA and an authorized State each have responsibility for one or more, but not all, of the permits eligible for consolidation, the responsible agencies must agree to consolidate the processing [40 CFR 124.4(c)(2)]. However, in either case, DOE is allowed to recommend whether permit application

Consequences of consolidated processing

processing should be consolidated or not [40 CFR 124.4(c)(3)]. If consolidation would delay issuance of the PSD permit for a DOE facility for more than one year from the effective date of the application under 40 CFR 124.3(f), the responsible agencies are not allowed to consolidate processing unless DOE consents in writing [40 CFR 124.4(e)].

If permit application processing is consolidated, the responsible agencies would prepare the affected draft permits at the same time [40 CFR 124.4(a)(1)]. Also, the statements of basis (required under 40 CFR 124.7 for EPA-issued permits only) or fact sheets (40 CFR 124.8), administrative records (required under 40 CFR 124.9 for EPA-issued permits only), public comment periods (40 CFR 124.10), and any public hearings (40 CFR 124.12) on those permits should also be prepared simultaneously. Nevertheless, final permits can be issued separately if joint processing would result in unreasonable delay in the issuance of one or more of the permits [40 CFR 124.4(a)(2)].

For existing facilities, the responsible regulatory agency is allowed to assign expiration dates when new or renewed permits eligible for consolidation are issued so that they coincide with expiration dates of existing eligible permits. The purpose of this procedure is to arrange for all permits to expire simultaneously so that processing of subsequent applications for permit renewals can be consolidated.

## MODULE 3-3: Draft RCRA Permits

Following its technical review of a RCRA permit application, the responsible regulatory agency will either issue a draft permit or deny the application [40 CFR 124.6(a)]. This module discusses the administrative process whereby the regulatory agency makes its final permit decision after either issuing a draft RCRA permit or denying a RCRA permit application. The public comment process, public hearing process and permit decision appeals process are covered.

### **Submodule 3-3-1: CONTENT AND SUPPORT FOR DRAFT RCRA PERMIT**

All draft RCRA permits must contain the following conditions, either stated expressly, or incorporated by reference:

- Conditions mandated by 40 CFR 270.30, Conditions applicable to all permits (Exhibit 3-4); and

The draft permit must contain conditions as specified by the regulations

### **EXHIBIT 3-4 PERMIT CONDITIONS MANDATED BY 40 CFR 270.30**

The following permit conditions are mandated by 40 CFR 270.30:

- Duty to comply
- Duty to reapply
- Not a defense for noncompliance that halt or reduction of activity would be required to comply
- Acts to minimize releases and prevent harm required during noncompliance
- Proper operation and maintenance required
- Effect of permit actions
- Property rights
- Duty to provide information
- Inspection and entry
- Monitoring and records
- Signatory requirements
- Reporting requirements



- Conditions mandated by 40 CFR 270.32, Establishing Permit Conditions (Exhibit 3-5).

### **EXHIBIT 3-5**

#### **PERMIT CONDITIONS MANDATED BY 40 CFR 270.32**

The following permit conditions are mandated by 40 CFR 270.32:

- Duration of the permit (40 CFR 270.50)
- Schedule of compliance [40 CFR 270.33(a)]
- Monitoring requirements (40 CFR 270.31)
- Alternative schedule of compliance (i.e., schedule for cessation of operation) [40 CFR 270.33(b)] (for EPA-issued permits only)
- Conditions mandated by other Federal laws (40 CFR 270.3) (for EPA-issued permits only)
- Site-specific conditions delineating compliance with applicable provisions of 40 CFR parts 264 and 266 through 268 (which includes provisions for corrective action)
- Other conditions needed to protect human health and the environment

In addition to the standard conditions required in all permits, RCRA permits for new hazardous waste incinerators must also contain the following [40 CFR 270.62(a)]:

Special permit conditions for hazardous waste incinerators

- Conditions applicable during the time required to bring the incinerator to a point of operational readiness, including, but not limited to, allowable waste feeds and operating conditions; and
- Conditions applicable during the trial burn.

After completion of the trial burn, a hazardous waste incinerator permit must be modified to incorporate conditions reflecting the results of the trial burn [40 CFR 270.62(c)]

A notice of intent to deny is processed like a draft permit

If the responsible regulatory agency decides to deny a permit application, it must issue a notice of intent to deny, rather than a draft permit. However, such notice is a type of draft permit, and is processed like any other draft permit [40 CFR 124.6(b)].

Draft permit or notice of intent to deny must be based on administrative record

All provisions of the draft permit or notice of intent to deny must be based on the administrative record (Exhibit 3-6) [40 CFR 124.6(e)].

### **EXHIBIT 3-6**

#### **COMPONENTS OF THE ADMINISTRATIVE RECORD**

The following are required components of the administrative record for a RCRA permit:

- Permit application, if required, and supporting data
- Draft permit or notice of intent to deny
- Statement of basis or fact sheet
- All documents cited in statement of basis or fact sheet, unless they are generally available and were specifically cited in the statement of basis or fact sheet
- Other supporting documents contained in the responsible agency's file

(40 CFR 124.9)

Each draft permit and notice of intent to deny must be accompanied by either a fact sheet or a statement of basis

When a draft permit is prepared, the responsible regulatory agency must prepare either a statement of basis or a fact sheet to explain the draft permit [40 CFR 124.6(e)]. A fact sheet is required for every major hazardous waste management facility draft permit (Exhibit 3-7) (40 CFR 124.8). A statement of basis (Exhibit 3-8) is required for any draft permit not requiring a fact sheet (40 CFR 124.7).

When the responsible regulatory agency prepares a draft permit for a major hazardous waste management facility, the agency must provide a copy of the fact sheet to the applicant. If others desire copies of the fact sheet, they must make a request to the agency (40 CFR 124.8).

### **EXHIBIT 3-7**

#### **CONTENTS OF FACT SHEET**

The following information must be included in the contents of the statement of basis for a RCRA permit:

- Brief description of permit conditions
- Brief statement of reasons for permit conditions

(40 CFR 124.7)

### **EXHIBIT 3-8**

The following information must be included in the fact sheet for a draft RCRA permit:

- Brief presentation of principal facts
- List of significant factual, legal, methodological and policy questions considered
- Any of the following information that applies:
  - Brief description of permitted facility or activity
  - Type and quantity of managed wastes
  - Annotated summary of permit condition bases
  - Justifications for granting or denying variances from or alternatives to required standards
  - Outline of procedures for reaching a final permit decision, including procedures whereby the public submits comments, requests a hearing, or otherwise participates in agency decision-making
  - Name and telephone number of agency contact person

(40 CFR 124.8)

## CONTENTS OF STATEMENT OF BASIS

### **Submodule 3-3-2: CAN DOE AFFECT DRAFT PERMIT CONTENT?**

Within the dictates of 40 CFR 270.30 and 270.32, permit writers at the responsible regulatory agency have considerable latitude to include site-specific RCRA permit conditions. Therefore, DOE personnel should communicate regularly with the responsible agency during the time the draft permit is being prepared.

Discussed below are specific suggestions for communications that could result in more informed development of permit conditions by agency permit writers. These consultation activities will be most successful if DOE has already engaged the responsible agency in dialogue concerning the proposed hazardous waste management units as recommended in Modules 3-1, Planning for RCRA Permitting, and 3-2, RCRA Permit Application Processing.

DOE personnel should implement any suggested communication activity listed below only after careful evaluation of site-specific factors that may influence the implementation approach. For example, if a DOE facility has an established public participation plan that addresses communications with the responsible regulatory agency, the

Suggestions for communicating with responsible regulatory agency during draft permit preparation

plan must be considered before proceeding with any communication suggestions below. Other site-specific factors that could affect the way DOE personnel choose to implement these suggestions include the DOE facility's past relationship with the responsible regulatory agency and the size, budget, and expertise of the regulatory agency staff.

- Submit suggested site-specific permit conditions with the RCRA Part B permit application.
- Discuss suggestions for site-specific permit conditions with the responsible regulatory agency staff at a meeting held in conjunction with submitting the RCRA Part B permit application.
- If a permit modification is being requested, submit a "marked-up" copy of the existing RCRA permit, clearly indicating where the permit should be changed to reflect the proposed modification, and suggesting unit-specific permit conditions.
- Contact the permit writer occasionally during the responsible agency's technical review of the RCRA Part B permit application to see if there are questions, or if additional information would be helpful.
- Be responsive to requests for information from the responsible regulatory agency.
- If additional information has been requested, contact the permit writer to see if a meeting would be helpful in addition to providing the requested information.
- After submitting additional information, contact the permit writer to ensure that the agency's questions have been fully answered.
- When the draft permit is issued, submit comments and supporting materials during the public comment period if any issues have not been resolved during the responsible agency's technical review.

#### Submodule 3-3-3:

**PUBLIC  
COMMENTS**  
The responsible regulatory agency must give public notice and provide at least a 45-day comment period

The responsible regulatory agency must notify the public (including the applicant) when a draft permit has been

prepared or a notice of intent to deny a permit application has been issued (Exhibit 3-9). At least 45 days must be allowed for the public to file comments and request a public hearing (40 CFR 124.10).

**EXHIBIT 3-9**  
**METHODS BY WHICH RESPONSIBLE AGENCY GIVES**  
**PUBLIC NOTICE**  
(40 CFR 124.10)

METHOD	RECIPIENTS
Mail notice.	Applicant Federal, State and Local agencies Persons on mailing list
Publication of notice in newspaper of general circulation.	Persons potentially affected
Broadcast of notice over local radio stations.	Persons potentially affected
Other methods reasonably calculated to give actual notice (e.g., press releases).	Persons potentially affected
NOTE: When an authorized State administers the RCRA program, the notice method must constitute legal notice to the public under state law	

Any interested person, including the applicant, can file comments and request a hearing

During the public comment period, any interested person (including the applicant) is allowed to submit written comments on a draft permit or notice of intent to deny (40 CFR 124.11) and can request a hearing [40 CFR 124.10(d)(1)(v)]. Comments must:

- Raise all reasonably ascertainable issues;
- Submit all reasonably available arguments; and
- Be accompanied by copies of any supporting material that is not either already part of the administrative record for the same permit application proceeding, or consisting of state or Federal statutes or regulations or other generally available reference materials (40 CFR 124.13).

DOE should submit comments concerning unresolved issues to preserve right to appeal, but resolution without commenting is preferred

As previously mentioned, DOE should submit comments and supporting materials during the public comment period if any issues have not been resolved during the responsible agency's review of a DOE application for a RCRA permit or permit modification. Preferably, DOE will have resolved all issues



before the draft permit is published for comment, but if not, commenting is necessary to preserve appeal rights.

Additional time for commenting can be granted to someone who needs it

If a potential commenter demonstrates a need, the responsible regulatory agency may grant additional time for filing comments (40 CFR 124.13).

When the responsible regulatory agency issues its final permit decision, it must respond to all significant comments received during the public comment period. The response must indicate changes made to the draft permit because of the comments, and the reasons for the changes (40 CFR 124.17).

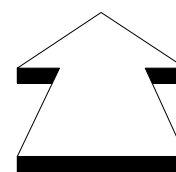
#### **Submodule 3-3-4: PUBLIC HEARINGS**

Under some circumstances a public hearing is mandatory. Otherwise, the responsible agency has discretion.

If the responsible regulatory agency receives, during the public comment period, written opposition to a draft RCRA permit accompanied by a hearing request, a hearing must be held [40 CFR 124.12(a)(3)]. A hearing must also be held if the responsible agency receives sufficient requests for a hearing to indicate significant public interest in the draft permit, even if written opposition is not stated [40 CFR 124.12(a)(1)]. Any other time, the responsible agency has discretion to hold a public hearing if doing so would clarify any issues involved in the permit decision [40 CFR 124.12(a)(2)].

Clearly, DOE can influence, to some degree, whether or not a public hearing occurs through an effective public participation program.

***For more information on required and suggested public participation activities during the RCRA permitting process, go to Submodule 3-1-5, What Public Participation Is Needed?***

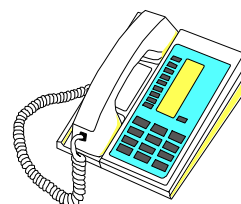


**GO TO  
Submodule 3-1-5**

30 days prior notice of hearing is required

If a public hearing will be held, the regulatory agency must give members of the public at least 30 days advance notice of the hearing date, time, and place [40 CFR 124.10(b)(2) and (d)(2)].

DOE has the right to request a hearing during the public comment period. However, there are probably very few



situations in which DOE should do so. Therefore, if a DOE manager responsible for RCRA permitting believes DOE should request a public hearing concerning a draft RCRA permit, permit modification, or permit denial, the manager should first consult the responsible DOE Headquarters Program office and the appropriate DOE Field Counsel's office to determine the proper course of action.

Public hearings are usually non-adjudicatory

Most public hearings concerning RCRA permitting decisions are non-adjudicatory. In other words, they are not held for the purpose of fact-finding or settling rights. Instead, they provide an opportunity for the regulatory agency to receive oral or written comments from the public.<sup>2</sup> However, unlike informal public meetings, which serve a similar purpose, a public hearing is supervised by a hearing officer [40 CFR 124.12(b)], a court reporter prepares a written transcript [40 CFR 124.12(d)], and little two-way communication occurs between the responsible agency and the public. The applicant or permittee is not required to participate in the hearing, but has the option to present comments.

DOE managers responsible for RCRA permitting activities should consider presenting an oral statement at any public hearing concerning a RCRA permit or permit modification. Facility-specific circumstances will influence whether DOE chooses to present oral comments. If a DOE facility has a strong public participation program and has communicated extensively with the responsible agency during preparation of the permit application and during the agency's review of the application, then it may be less appropriate to make oral comments at a hearing.

Holding a public hearing automatically extends the public comment period through the end of the hearing

**Submodule 3-3-5:**  
**REOPENING**  
**PUBLIC COMMENT**

If a public hearing is held, the public comment period is automatically extended until the close of the hearing. Additional time for the public to comment beyond the close of the hearing can be added if the hearing officer announces it at the hearing [40 CFR 124.12(c)].

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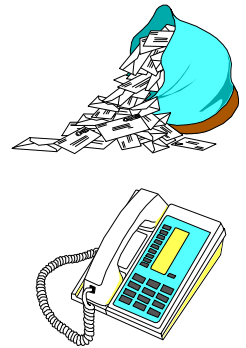
<sup>2</sup> The responsible agency has discretion to use the non-adversarial fact-finding panel procedures specified by 40 CFR part 124, subpart F instead, if the agency believes an adjudicatory proceeding would be appropriate, or if the commenter requesting the hearing submits information demonstrating the existence of genuine issues of material fact as required by 40 CFR 124.114(a)(1)-(4).

Sometimes the public comment period can be reopened, but the scope is limited and the procedures are different

After the initial public comment period ends, the responsible regulatory agency can yet again ask for public comment if it appears that the permit decision will be contested and an additional chance for the public to comment could expedite the decision-making process [40 CFR 124.14(a)]. However, comments made during the reopened comment period must be limited in scope to the substantial new questions that caused the reopening [40 CFR 124.14(c)]. Also, during the reopened public comment period, the procedures are different than during the initial comment period. This time, a period of at least 60 days is provided for comment. During that period, persons who believe the responsible regulatory agency's proposed permit decision is inappropriate must submit all reasonably available factual grounds supporting their position, including all supporting material. Then, a period of at least 20 days is provided for anyone to respond to the material filed during the first 60 days [40 CFR 124.14(a)(1)]. If the proceedings are complicated, longer time periods can be granted to prepare comments and responses if requested by a commenter [40 CFR 124.14(a)(4)].



If the public comment period is reopened, DOE should carefully consider whether to comment and should monitor any comments and supporting materials filed by others. If appropriate, DOE should respond to the comments of others during the 20-day response period. The decision to comment or respond to the comments of others must be made based on facility-specific factors. Again, DOE managers responsible for RCRA permitting activities should seek input from the responsible DOE Headquarters Program office and the appropriate DOE Field Counsel's office.



After the public comment period closes, the responsible regulatory agency issues its final permit decision

After the public comment period is closed, the responsible regulatory agency issues a final permit decision (a final decision to issue, deny, modify, revoke and reissue, or terminate a permit). Notice of the final permit decision must be sent to the applicant, individuals and entities that submitted written comments during the comment period, and anyone else who asked to be notified. The final permit decision notice must include reference to the procedures for appealing a decision [40 CFR 124.15(a)].

#### **Submodule 3-3-6: PERMIT DECISION APPEALS**

This submodule describes how EPA-issued RCRA permit decisions are appealed. If a State is the responsible regulatory agency, the appeal procedure may be different. Therefore, DOE personnel with responsibility for permitting RCRA hazardous waste and RMW TSD units in authorized States should review applicable state permit decision appeal procedures.



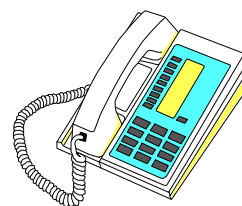
Only persons who comment during the public comment period or participate in the public hearing can appeal the final permit decision

Only persons who commented during the public comment period or who participated in the public hearing can appeal the final permit decision. This requirement applies to the applicant, as well as members of the general public. Also, only issues raised during the public comment period can be appealed, unless a permit condition that changed between the draft and final decisions is challenged [40 CFR 124.19(a)].

To appeal, a petition must be filed within 30 days after receiving the final decision notice

To initiate an administrative appeal, a petition must be filed with the EPA Environmental Appeals Board within 30 days after the final decision notice is received, unless an alternative date is specified in the notice [40 CFR 124.19(a)]. The Environmental Appeals Board may also decide on its own initiative to review a final permit decision [40 CFR 124.19(b)].

Since DOE managers responsible for RCRA permitting should communicate openly with all responsible regulatory agencies during the RCRA permitting process, a final permit decision should seldom warrant an appeal by DOE. However, if the responsible DOE manager believes DOE should appeal, the responsible DOE Headquarters Program office and appropriate DOE Field Counsel's office should be consulted.



The final permit is effective 30 days after the final decision notice, unless an appeal is granted

In case of an appeal, the effectiveness of final permit conditions depends on the status of the facility

If no administrative appeal of a final decision to issue a RCRA permit is initiated, then the final permit becomes effective 30 days after the final decision notice. However, if an appeal is granted, the effectiveness of the final permit conditions will depend on the status of the facility, as follows:

- If the facility is new (an entirely new facility or a new unit at an existing facility), none of the permit conditions will be effective during the appeal process, and the new facility cannot begin construction pending completion of the appeal [40 CFR 124.16(a)(1)].
- If the facility is existing, but has no permit (e.g., an existing facility or unit with interim status), then contested permit conditions and non-severable<sup>3</sup> uncontested conditions do not become effective until the appeal process is completed. While an appeal is pending, the facility must comply with applicable interim status regulations and any severable uncontested provisions of the new permit [40 CFR 124.16(a)(1) and (2)].

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<sup>3</sup> A permit condition is "non-severable" if it cannot be carried out independently. For example, a permit condition requiring retention of monitoring records is non-severable because it cannot be executed without another permit condition requiring monitoring. Hence, if the monitoring requirement is contested, both the monitoring requirement and the requirement to retain monitoring records would be ineffective during the appeal process.

- If the facility has an existing permit, then contested and non-severable uncontested conditions of the new permit are not effective until the appeal process is completed. While an appeal is pending, the facility must continue to comply with any conditions of its existing permit that would be replaced by the ineffective conditions of the new permit, unless complying with the existing conditions would be technologically incompatible with complying with other conditions of the new permit that are not appealed [40 CFR 124.16(c)]. The facility also must comply with any severable uncontested provisions of the new permit.

After administrative remedies are exhausted, anyone who filed a petition for appeal can seek judicial review

The Federal administrative appeal process ends (i.e., administrative remedies are exhausted) when [40 CFR 124.19(f)(1)]:

- The EPA Environmental Appeals Board denies review;
- The EPA Environmental Appeals Board issues a decision, other than a remand<sup>4</sup>; or
- EPA issues a second final permit after complying with a prior remand order, unless the remand order specified that the second final permit could also be appealed.

If EPA is the responsible regulatory agency, after the administrative appeal process ends, any person, except another Federal executive agency (e.g., DOE), who filed a petition for appeal may seek judicial review of the outcome of the administrative appeal in Federal court [40 CFR 124.19(e)]. If DOE disagrees with the decision of the EPA Environmental Appeals Board, the only available recourse would involve appeal by the Secretary of Energy to the President.

As mentioned at the beginning of this submodule, if a State is the responsible regulatory agency, the appeal procedures related to RCRA permit decisions will be different. DOE personnel responsible for permitting RCRA hazardous waste and RMW TSD units in an authorized State should become familiar with the procedures in that State.

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<sup>4</sup> A "remand" would send the contested permit condition(s) back to EPA for reconsideration.

## MODULE 3-4: Duration and Termination of RCRA Permits

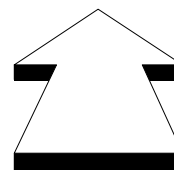
This module discusses the requirements for complying with the conditions of a permit during its term and the procedures used for terminating permits.

### **Submodule 3-4-1:** **RCRA PERMIT** **COMPLIANCE** **REQUIREMENTS**

During a RCRA permit's term, compliance with all conditions is required, unless an emergency permit applies

Compliance is required with all conditions of a final RCRA permit during its term, unless noncompliance has been authorized by an emergency permit [40 CFR 270.30(a)].

***For more information on emergency permits, go to Module 5-1, Emergency Permits.***



**GO TO Module 5-1**

If a RCRA permit is expiring (or has already expired), and a timely permit renewal application has been filed, the conditions of the expired or expiring permit continue in force until the effective date of a new permit [40 CFR 270.51(a)(1)]. Hence, compliance with the conditions of the expired or expiring permit is still required. The responsible regulatory agency may deal with noncompliance during this period, using any or all of the following actions:

- Initiate enforcement on the basis of the expired or expiring permit condition [40 CFR 270.51(c)(1)].
- Issue a notice of intent to deny permit renewal. Then, if permit renewal is denied, operation of the facility must cease or the facility will be subject to enforcement for operating without a permit [40 CFR 270.51(c)(2)].
- Issue a new permit containing appropriate conditions (removing the noncompliance) [40 CFR 270.51(c)(3)].
- Take other authorized action, as appropriate [40 CFR 270.51(c)(4)].

Permit expiration and cessation of operations do not excuse compliance with certain RCRA requirements

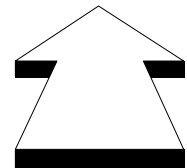
Guidance on how DOE should respond to enforcement actions is beyond the scope of this manual. Nevertheless, DOE managers should be aware that even if a DOE RCRA permit

expires and operations cease, DOE still must comply with certain RCRA requirements, including corrective action, closure, post-closure care, and record keeping.

**Submodule 3-4-2:  
RCRA PERMIT  
TERMINATION**

A RCRA permit may terminate at the end of its term according to its own conditions if a timely renewal application is not filed [40 CFR 270.10 (h)].

***For more information on renewing RCRA permits, go to Module 2-4, Reapplication.***



**GO TO Module 2-4**

A RCRA permit terminates if it is not renewed or if the responsible regulatory agency determines that a cause for termination exists

The responsible regulatory agency may terminate a RCRA permit during its term either at the request of an interested person (including the permittee) or upon the agency's own initiative [40 CFR 124.5(a)]. However, unless the termination is requested by the permittee, a RCRA permit can only be terminated during its term for one of the causes listed in 40 CFR 270.43 (Exhibit 3-10).

**EXHIBIT 3-10  
CAUSES FOR TERMINATING  
A RCRA PERMIT DURING ITS TERM  
(40 CFR 270.43)**

Unless the termination is requested by the permittee, the responsible regulatory agency may terminate a RCRA permit during its term only for one of the following causes:

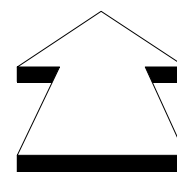
- Noncompliance with any permit condition, unless noncompliance has been authorized by an emergency permit (see Module 5-1, Emergency Permits)
- Failure to fully disclose relevant facts during the permit application process, or misrepresentation of relevant facts at any time
- Endangerment of human health or the environment that can be remedied only by terminating the permit

NOTE: These are also causes for denying permit renewal applications (see Module 2-4, Reapplication)

As is true for permit expiration, even if a DOE RCRA permit is terminated and operations cease, DOE still must comply with certain RCRA requirements, including corrective action, closure, post-closure care and record keeping.

Requests to terminate a permit must be filed with the responsible regulatory agency. If that agency is EPA, and EPA agrees that termination would be appropriate, then a notice of intent to terminate will be issued. A notice of intent to terminate, just like a notice of intent to deny a permit application, is handled as a type of draft permit. If the notice of intent to terminate is initiated by EPA at the request of the permittee, it will be processed according to the same procedures used to process draft RCRA permits.

***For more information on the procedure for processing draft RCRA permits, go to Module 3-3, Draft RCRA Permits.***



However, if the notice of intent to terminate is initiated by EPA for one of the causes listed on Exhibit 3-10, then it will be processed according to the formal hearing procedures in 40 CFR part 124, subpart E. **GO TO Module 3-3**

If the responsible regulatory agency is a state agency, the procedure for processing a notice of intent to terminate may be different. DOE managers responsible for RCRA permitting in authorized States should review applicable state requirements.



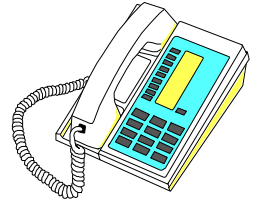
If EPA decides that a request to terminate is not justified, the requester must be sent a brief written response giving the reason for the decision (notice of decision). Denials of requests to terminate RCRA permits do not require public notice, comment, or hearings, but if EPA is the responsible agency, the decision can be informally appealed to the EPA Environmental Appeals Board by a letter briefly setting out the relevant facts [40 CFR 124.5(b)].

If the appeal is granted, the Board will consider the evidence and may [40 CFR 124.5(b)]:

- Direct EPA to begin termination proceedings; or
- Direct EPA to modify, or revoke and reissue the permit.

If EPA does not approve a request to terminate a RCRA permit and the requester does not appeal, the permit and requirements for compliance continue as before.

DOE managers responsible for RCRA permitting should contact the responsible DOE Headquarters Program office and the appropriate DOE Field Counsel's office immediately upon receiving notice of a request by anyone other than DOE for termination of a DOE facility's RCRA permit.



## **REFERENCES**

### **Statutes**

Atomic Energy Act of 1954, P.L. 83-703, as amended.

Clean Air Act, P.L. 90-148, as amended, Title IV (Acid Deposition Control).

Clean Air Act, P.L. 90-148, as amended, Title V (Permits).

Clean Water Act, as amended by the Federal Water Pollution Control Act Amendments of 1972, P.L. 92-500.

Coastal Zone Management Act of 1972, P.L. 92-583, as amended.

Endangered Species Act, P.L. 93-205, as amended.

Energy Reorganization Act of 1974, P.L. 93-438, as amended.

Federal Water Pollution Control Act, P.L. 92-500, as amended.

Fish and Wildlife Coordination Act, P.L. 85-624, as amended.

National Environmental Policy Act, P.L. 91-190, as amended.

National Historic Preservation Act, P.L. 89-655, as amended.

Resource Conservation and Recovery Act, P.L. 94-580, as amended.

Wild and Scenic Rivers Act, P.L. 90-542, as amended.

### **Regulations**

10 CFR Part 30, "Nuclear Regulatory Commission Rules of General Applicability to Domestic Licensing of Byproduct Material."

10 CFR Part 40, "Nuclear Regulatory Commission Regulations on Domestic Licensing of Source Material."

10 CFR Part 70, "Nuclear Regulatory Commission Regulations on Domestic Licensing of Special Nuclear Material."

10 CFR Part 72, "Nuclear Regulatory Commission Regulations on Licensing Requirements for the Independent Storage of Spent Nuclear Fuel and High-Level Radioactive Waste."

10 CFR Part 1021, "Department of Energy National Environmental Policy Act Implementing Procedures."



- 15 CFR Part 930, "National Oceanic and Atmospheric Administration Regulations on Federal Consistency with Approved Coastal Management Programs."
- 33 CFR Parts 321, "Army Corps of Engineers Permit Regulations for Dams and Dikes."
- 33 CFR Part 322, "Army Corps of Engineers Permit Regulations for Structures."
- 33 CFR Part 323, "Army Corps of Engineers Permit Regulations for Dredged Materials."
- 33 CFR Part 330, "Army Corps of Engineers Nationwide Permit Program Regulations."
- 36 CFR Part 800, "Advisory Council on Historic Preservation Regulations on Protection of Historic and Cultural Properties."
- 40 CFR Part 52, "EPA Regulations on Approval and Promulgation of Implementation Plans."
- 40 CFR Part 60, "EPA Regulations on Standards of Performance for New Stationary Sources."
- 40 CFR Part 61, "EPA Regulations on National Emission Standards for Hazardous Air Pollutants."
- 40 CFR Part 63, "EPA Regulations on National Emission Standards for Hazardous Air Pollutants for Source Categories."
- 40 CFR Part 70, "EPA Regulations on State Operating Permit Programs."
- 40 CFR Part 81, "EPA Regulations Designating Areas for Air Quality Planning."
- 40 CFR Part 122, "EPA Regulations on State Certification of Activities Requiring a Federal License or Permit."
- 40 CFR Part 124, "EPA Procedures for Decisionmaking."
- 40 CFR Part 270, "EPA Administered Permit Programs: The Hazardous Waste Permit Program."
- 40 CFR Part 1506, "Council on Environmental Quality Regulations on Other Requirements of NEPA."

## **Federal Register**

- 57 FR 32250 (July 21, 1992), "Final Rule: Operating Permit Program."
- 60 FR 63417 (December 11, 1995), "Final Rule: RCRA Expanded Public Participation."
- 61 FR 34202 (July 1, 1996), "Final Rule: Federal Operating Permits Program."
- 61 FR 63122, 63223 (November 29, 1996), "Environmental Protection Agency Semiannual Regulatory Agency, Radionuclide Major Source Definition (RIN: 2060-AD60)."

## Other Publications

- U.S. Department of Energy, *Public Participation in Environmental Restoration Activities* (DOE/EH-0221, November 1991).
- U.S. Department of Energy, "Public Participation Policy for Environmental Restoration and Waste Management" (October 1992).
- U.S. Department of Energy, "Public Participation Guidance for Environmental Restoration and Waste Management" (March 1993).
- U.S. Environmental Protection Agency, *RCRA Public Participation Manual* (EPA530-R-96-007, September 1996).
- U.S. Department of Energy, *Public Participation Desk Reference* (1994).
- U.S. Department of Energy, "Site-Specific Advisory Board Guidance - Final" (January 1996).

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# Chapter 4

## RCRA Permit Modification

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# RCRA PERMIT MODIFICATION

## INTRODUCTION

RCRA permit modifications may be initiated by:

- the permittee (in this case DOE), or
- the regulator

If any person or organization other than the permittee requests that a RCRA permit be modified, the regulator may decide to pursue the modification as a regulator-initiated modification. If the regulator decides not to pursue the modification, the modification is dropped.

This chapter discusses both mechanisms for modification.

The transfer of a RCRA permit, which is a change initiated by the permittee, is addressed in Module 4-1, Modifications Initiated by DOE. The revocation or forced termination of a RCRA permit, which is a change initiated by the regulator, is addressed in Module 4-2, Modifications/Terminations Initiated by the Regulator.

### **Module 4-1                      Modifications Initiated by DOE**

Modifications initiated by DOE include all changes to a permit requested by DOE, including permit transfers. The Federal RCRA regulations define three classes of permit modifications.

- Class 1 modifications are the least substantive permit changes. They involve routine changes and correction of errors. The regulatory requirements for obtaining Class 1 modifications involve minimal regulator oversight and public notification/participation. The transfer of a RCRA permit is a Class 1 permit modification. Class 1 permit modifications are discussed in Submodule 4-1-1.
- Class 2 modifications are substantive permit changes needed to maintain a facility's capability to manage wastes safely or to conform to new requirements. The regulatory requirements for obtaining Class 2 modifications involve considerable regulator input and public notification/participation. Class 2 permit modifications are discussed in Submodule 4-1-2.
- Class 3 modifications are the most substantive permit changes. These modifications are required to significantly alter the facility or its operations. The regulatory requirements for obtaining Class 3 permit modifications involve considerable regulator input, public notification/participation, and adherence to the administrative permitting procedures applicable to the processing of applications



for full RCRA permits in 40 CFR 124. Class 3 permit modifications are discussed in Submodule 4-1-3.

Actions requiring Class 1, 2, and 3 modifications are listed in Appendix I to 40 CFR 270.42. However, DOE might want to amend a permit to incorporate changes not explicitly listed in this appendix. Submodule 4-1-4 addresses these types of permit modifications.

Under certain conditions, Class 2 and Class 3 modifications can be made to RCRA permits without prior public notice or comment. Submodule 4-1-4 describes the conditions under which such temporary authorizations can be issued.

## **Module 4-2            Modifications/Terminations Initiated by the Regulator**

A regulator may modify, revoke and reissue, or terminate a RCRA permit for cause. The conditions under which a regulator may take these actions are addressed in this module.

## MODULE 4-1: Modifications Initiated by DOE



In the Federal RCRA regulations, a table comprising Appendix I to 40 CFR 270.42 lists possible actions requiring permit modifications. The modification associated with each action is assigned to Class 1, 2, or 3.

Some Class 1 Modifications  
Require Regulator Approval

Exhibit 4-1 lists the actions requiring Class 1 permit modifications included in Appendix I to 40 CFR 270.42. It shows that Class 1 modifications fall into two groups. Some Class 1 permit modifications require regulator approval before the changes triggering the modification are implemented, while others do not. Exhibit 4-2 lists the regulatory requirements for permittees and regulators that are associated with both types of Class 1 permit modifications.

Change of Ownership/  
Operational Control is  
Subject to Additional  
Requirements

A permit modification to reflect changes in the ownership or operational control of a facility is a Class 1 permit modification requiring prior regulator approval (40 CFR 270.40). This type of Class 1 permit modification is also subject to additional regulatory requirements. Specifically, this type of change requires that:

- a revised permit application be submitted to the regulator no later than 90 days before the scheduled change [270.40(b)];
- a written agreement containing the specific date for transfer of permit responsibility between current and new permittees be submitted to the regulator [270.40(b)]; and
- new owners/operators demonstrate compliance with 40 CFR 264, Subpart H financial requirements (40 CFR 264.143, 264.145, and 264.147) within 6 months after the change in ownership or operational control of the facility [270.40(b)] (unless, like DOE, the new owner/operator is exempt from these requirements).

## **EXHIBIT 4-1**

### **ACTIONS REQUIRING CLASS 1 PERMIT MODIFICATIONS**

- General Permit Provisions
  - Administrative and informational changes
  - Correction of typographical errors
  - Equipment replacement or upgrading with functionally equivalent components (e.g., pipes, valves, pumps, conveyors, controls)
  - Changes in the frequency of or procedures for monitoring, reporting, sampling, or maintenance activities by the permittee to provide for more frequent monitoring, reporting, sampling, or maintenance
  - Changes in interim compliance dates in a schedule of compliance\*
  - Changes in expiration date of permit to allow earlier permit termination\*
  - Changes in ownership or operational control of a facility, provided the procedures of §270.40(b) are followed\*
- General Facility Standards
  - Changes to waste sampling or analysis methods
    - To conform with agency guidance or regulations
    - To incorporate change associated with F039 (multi-source leachate) sampling or analysis methods
    - To incorporate changes associated with underlying hazardous constituents in ignitable or corrosive wastes\*
  - Changes to analytical quality assurance/control plan to conform with agency guidance or regulations
  - Changes in procedures for maintaining the operating record
  - Changes in the training plan that do not affect the type or decrease the amount of training given to employees
  - Contingency plan
    - Replacement with functionally equivalent equipment, upgrade, or relocate emergency equipment listed
    - Changes in name, address, or phone number of coordinators or other persons or agencies identified in the plan
  - Construction quality assurance plan changes that the CQA officer certifies in the operating record will provide equivalent or better certainty that the unit components meet the design specifications

## EXHIBIT 4-1 (Cont'd.)

- Groundwater Protection
  - Replacement of an existing well that has been damaged or rendered inoperable, without change to location, design, or depth of the well
  - Changes in groundwater sampling or analysis procedures or monitoring schedule\*
  - Changes in statistical procedure for determining whether a statistically significant change in groundwater quality between upgradient and downgradient wells has occurred\*
- Closure
  - Changes to the closure plan
    - Changes in estimate of maximum extent of operations or maximum inventory of waste on-site at any time during the active life of the facility\*
    - Changes in the closure schedule for any unit, changes in the final closure schedule for the facility, or extension of the closure period\*
    - Changes in the expected year of final closure, where other permit conditions are not changed\*
    - Changes in procedures for decontamination of facility equipment or structures\*
  - Addition of the following new units to be used temporarily for closure activities: tanks used for neutralization, dewatering, phase separation, or component separation\*
- Post-Closure
  - Changes in name, address, or phone number of contact in post-closure plan
  - Changes to the expected year of final closure, where other permit conditions are not changed

## EXHIBIT 4-1 (Cont'd.)

- Containers

- Modification or addition of container units

- Addition of a roof to a container unit without alteration of the containment system

- Modification or addition of containerized treatment processes necessary to treat wastes

- That are restricted from land disposal to meet some or all of the treatment standards\*

- To satisfy (in whole or in part) the standard of "use of practically available technology that yields the greatest environmental benefit" contained in 40 CFR 268.8(a)(2)(ii)\*

These modifications may also involve addition of new waste codes or narrative descriptions of wastes, but cannot be used to add dioxin-containing wastes (F020, 021, 022, 023, 026, 027 and 028).

- Storage or treatment of different wastes in containers

- That require addition of units or change in treatment process or management standards, provided that the wastes are restricted from land disposal and are to be treated to meet some or all of the applicable treatment standards, or that are to be treated to satisfy (in whole or in part) the standard of "use of practically available technology that yields the greatest environmental benefit" contained in 40 CFR 268.8(a)(2)(ii). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028)

- That do not require the addition of units or a change in the treatment process or management standards, provided that the units have previously received wastes of the same type (e.g., incinerator scrubber water). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028)\*

## EXHIBIT 4-1 (Cont'd.)

- Tanks
  - Modification or addition of tank units resulting in an increase in the facility's tank capacity by
    - Addition of a new tank that will operate for up to 90 days using any of the following physical or chemical treatment technologies: neutralization, dewatering, phase separation, or component separation\*
    - Modification or addition of tank units or treatment processes necessary to treat wastes that are restricted from land disposal to meet some or all of the applicable treatment standards or to treat wastes to satisfy (in whole or in part) the standard of "use of practically available technology that yields the greatest environmental benefit" contained in 40 CFR 268.8(a)(2)(ii). This modification may also involve addition of new waste codes. It is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028)\*
  - Replacement of a tank with a tank that meets the same design standards and has a capacity within +/-10% of the replaced tank provided
    - The capacity difference is no more than 1500 gallons,
    - The facility's permitted tank capacity is not increased, and
    - The replacement tank meets the same conditions in the permit.
  - Management of different wastes in tanks
    - That require addition of units or change in treatment processes or management standards, provided that the wastes are restricted from land disposal and are to be treated to meet some or all of the applicable treatment standards, or that are to be treated to satisfy (in whole or in part) the standard of "use of practically available technology that yields the greatest environmental benefit" contained in 40 CFR 268.8(a)(2)(ii). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028)\*
    - That do not require the addition of units or a change in the treatment process or management standards, and provided that the units have previously received wastes of the same type (e.g., incinerator scrubber water). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028)

## EXHIBIT 4-1 (Cont'd.)

- Surface Impoundments

- Treatment, storage, or disposal of different wastes in surface impoundments
  - That are wastes restricted from land disposal that meet the applicable treatment standards or that are treated to satisfy the standard of "use of practically available technology that yields the greatest environmental benefit" contained in 40 CFR 269.8(a)(2)(ii), and provided that the unit meets the minimum technological requirements stated in 40 CFR 268.5(h)(2). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028)
  - That are residues from wastewater treatment or incineration, provided that disposal occurs in a unit that meets the minimum technological requirements stated in 40 CFR 268.5(h)(2), and provided further that the surface impoundment has previously received wastes of the same type (for example, incinerator scrubber water). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028)
- Modifications of unconstructed units to comply with 40 CFR 264.221(c), 264.222, 264.223, and 264.226(d)\*

- Landfills

- Landfill different wastes
  - That are wastes restricted from land disposal that meet the applicable treatment standards or that are treated to satisfy the standard of "use of practically available technology that yields the greatest environmental benefit" contained in 40 CFR 268.8(a)(2)(ii), and provided that the landfill unit meets the minimum technological requirements stated in 40 CFR 268.5(h)(2). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028)
  - That are residues from wastewater treatment or incineration, provided that disposal occurs in a landfill unit that meets the minimum technological requirements stated in 40 CFR 268.5(h)(2), and provided further that the landfill has previously received wastes of the same type (for example, incinerator ash). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028)
- Modifications of unconstructed units to comply with 40 CFR 264.251(c), 264.252, 264.253, 264.254(c), 264.301(c), 264.302, 264.303(c), and 264.304\*

## EXHIBIT 4-1 (Cont'd.)

- Incinerators
  - Shakedown and trial burn
    - Authorization of up to an additional 720 hours of waste burning during the shakedown period for determining operational readiness after construction\*
    - Changes in the operating requirements set in the permit for conducting a trial burn, provided the change is minor\*
    - Changes in the ranges of the operating requirements set in the permit to reflect the results of the trial burn, provided the change is minor\*
  - Substitution of an alternative type of nonhazardous waste fuel that is not specified in the p
- Containment Buildings
  - Replacement of a containment building with a containment building that meets the same design standards provided
  - The unit capacity is not increased
  - The replacement containment building meets the same conditions in the permit

\*Requires prior regulator approval.



**EXHIBIT 4-2**  
**REGULATORY REQUIREMENTS ASSOCIATED WITH CLASS 1 PERMIT MODIFICATIONS (40 CFR 270.42)**

Type of Modification	Permittee Requirements (Citation)	Regulator Requirements (Citation)
Modification That Does Not Require Prior Approval of the Regulator	<ul style="list-style-type: none"> <li>• Notify the regulator concerning the modification by certified mail or other means that establish proof of delivery within 7 calendar days after the change is put into effect [40 CFR 270.42(a)(1)(i)].</li> <li>• The notice must specify the changes being made to permit conditions or supporting documents referenced by the permit and must explain why they are necessary [40 CFR 270.42(a)(1)(i)].</li> <li>• Along with the notice, provide applicable information required by 40 CFR 270 permit application regulations [40 CFR 270.42(a)(1)(i)]. (The exhibits in Chapter 2 list the information required by these regulations.)</li> <li>• Send a notice of the modification to all persons on the facility mailing list maintained by the regulator in accordance with 40 CFR 124.10(c)(viii) (or the equivalent State regulation) within 90 days after the change is put into effect [40 CFR 270.42(a)(1)(ii)].</li> <li>• Send a notice of the modification to the appropriate units of State and local government, as specified in 40 CFR 124.10(c)(ix) (or the equivalent State regulation) within 90 days after the change is put into effect [40 CFR 270.42(a)(1)(ii)].</li> </ul>	If any persons asks the regulator to review a Class 1 modification that does not require prior regulator approval, the regulator must inform the permittee by certified mail if the modification is rejected. The reasons for the rejection must be explained [40 CFR 270.42(a)(1)(iii)].
Modification that Requires Prior Approval of the Regulator	<ul style="list-style-type: none"> <li>• Obtain the prior written approval of the regulator [40 CFR 270.42(a)(1)(2)].</li> <li>• Within 90 days after the regulator approves the request, send a notice of the modification to all persons on the facility mailing list maintained by the regulator in accordance with 40 CFR 124.10(c)(viii) (or the equivalent State regulation) [40 CFR 270.42(a)(1)(ii)].</li> <li>• Within 90 days after the regulator approves the request, send a notice of the modification to the appropriate units of State and local government, as specified in 40 CFR 124.10(c)(ix) (or the equivalent State regulation) [40 CFR 270.42(a)(1)(ii)].</li> </ul>	There are no specific requirements applicable to the regulator.*

\* The permittee may elect to follow Class 2 modification procedures. These procedures require the regulator to approve or disapprove permit modification requests within specified time frames. See Exhibit 4-5 for additional information.

Once the regulator is notified of the proposed transfer of ownership or operational control, the regulator may elect to revoke and reissue the permit rather than modify the existing permit. In this case, an entirely new permit is processed according to the administrative permitting procedures applicable to the processing of RCRA permits in 40 CFR 124 (see Chapter 3).

DOE must request a Class 1 permit modification involving changes of ownership or operational control when:

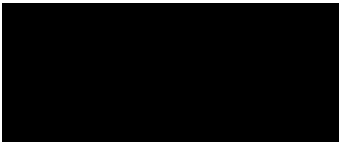
- selling or transferring DOE facilities or portions of facilities with RCRA permits,
- adding an operating contractor at a RCRA permitted facility, or
- replacing an operating contractor at a RCRA permitted facility with another contractor.

For example, when DOE transferred operations of the Paducah and Portsmouth Gaseous Diffusion Plants to the Uranium Enrichment Corporation (UEC), RCRA permits were modified to add the UEC as site operators.

Regulatory requirements applicable to the transfer of environmental permits are discussed in the DOE Information Brief entitled “Transfer of Environmental Permits After the Sale or Transfer of DOE Property” (EH-413-061/1195).

DOE May Follow Class 2 Procedures if the Regulator Does Not Respond to a Permit Modification Request

Any permittee may elect to follow the Class 2 permit modification procedures for Class 1 modifications. Using Class 2 procedures may be preferable for Class 1 modifications needing prior regulator approval if the regulator fails to respond to the permittee's Class 1 modification request. This is true because the procedural regulations applicable to Class 2 permit modifications require regulators to make decisions within specified time frames (see Submodule 4-1-2).



In the Federal RCRA regulations, a table comprising Appendix I to 40 CFR 270.42 lists possible actions requiring permit modifications. The modification associated with each action is assigned to Class 1, 2, or 3.

Exhibit 4-3 lists the actions requiring Class 2 permit modifications included in Appendix I to 40 CFR 270.42. In this submodule, two separate exhibits list the regulatory requirements applicable to permittees (Exhibit 4-4) and regulators (Exhibit 4-5) associated with Class 2 permit modifications.

The Regulator Must Respond with a Decision on a Class 2 Modification Request or DOE Will Receive Automatic Authorization

Exhibit 4-4 shows that DOE must satisfy requirements applicable to the contents of the permit modification request, public notice, public access, public meetings and public comment period. Exhibit 4-5 shows that the regulator must respond to DOE's request for a Class 2 modification within 90 days, although one response allows the regulator to take an additional 30 days to respond. The regulator may also approve a request, with or without changes, as a temporary authorization for up to 180 days. A temporary authorization may be reissued for an additional 180-day term [40 CFR 270.42(e)(4)(i)].

If the regulator fails to make a decision within 120 days after the modification request, DOE is automatically authorized to implement the requested modification for up to 180 days [40 CFR 270.42(b)(6)(iii)]. This is known as an "automatic authorization." The regulator may only extend the 120 day period if he or she receives written DOE approval for the extension [40 CFR 270.42(b)(6)(vii)].

Other Requirements Applicable to Automatic or Temporary Authorization

Regulator Approval or Denial Cancels an Automatic or Temporary Authorization

If the regulator approves or denies a Class 2 modification request during the term of an automatic or temporary authorization, the action cancels the automatic or temporary authorization [40 CFR 270.42(b)(6)(iii)].

**EXHIBIT 4-3**  
**ACTIONS REQUIRING CLASS 2 PERMIT MODIFICATIONS**

- General Permit Provisions
  - Changes in the frequency of or procedures for monitoring, reporting, sampling, or maintenance activities by the permittee that do not involve increased frequency
- General Facility Standards
  - Changes to waste sampling or analysis methods not listed on Exhibit 4-1
  - Changes to analytical quality assurance/control plan not listed on Exhibit 4-1
  - Changes in frequency or content of inspection schedules
  - Changes in the training plan that affect the type or decrease the amount of training given to employees
  - Contingency plan
    - Changes in emergency procedures (i.e., spill or release response procedures)
    - Removal of equipment from emergency equipment list
  - Construction quality assurance plan changes not listed on Exhibit 4-1
- Groundwater Protection
  - Changes in the number, location, depth, or design of upgradient or downgradient wells of permitted groundwater monitoring system
  - Changes in point of compliance
  - Changes in indicator parameters, hazardous constituents, or concentration limits (including ACLs) as specified in the detection monitoring program
  - Changes to a detection monitoring program as required by §264.98(h), unless otherwise specified on this Exhibit, Exhibit 4-1, or Exhibit 4-6

### EXHIBIT 4-3 (Cont'd.)

- Changes to a compliance monitoring program as required by §264.99(j), unless otherwise specified on this Exhibit, Exhibit 4-1, or Exhibit 4-6
- Changes to a corrective action program as required by §264.100(h), unless otherwise specified on this Exhibit, Exhibit 4-1, or Exhibit 4-6

- Closure

- Changes to the closure plan
  - Changes in approved closure plan resulting from unexpected events occurring during partial or final closure, unless otherwise specified on this Exhibit, Exhibit 4-1, or Exhibit 4-6
  - Extension of the closure period to allow a landfill, surface impoundment or land treatment unit to receive nonhazardous wastes after final receipt of hazardous wastes under §264.113(d) and (e)
- Addition of the following new units to be used temporarily for closure activities
  - Waste piles that comply with §264.250(c)
  - Tanks or containers (other than those used for neutralization, dewatering, phase separation or component separation)

- Post-Closure

- Extension of post-closure care period
- Changes in post-closure plan necessitated by events occurring during the active life of the facility, including partial and final closure

### EXHIBIT 4-3 (Cont'd.)

- Containers
  - Modification or addition of container units resulting in up to 25% increase in the facility's container storage capacity, except as provided on Exhibit 4-1
  - Modification of a container unit without increasing the capacity of the unit
  - Storage of different wastes in containers that do not require additional or different management practices from those authorized in the permit, except as provided on Exhibit 4-1
- Tanks
  - Modification or addition of tank units resulting in up to 25% increase in the facility's tank capacity, except as provided on Exhibit 4-1
  - Addition of a new tank that will operate for more than 90 days using any of the following physical or chemical treatment technologies: neutralization, dewatering, phase separation, or component separation
  - Modification of a tank unit or secondary containment system without increasing the capacity of the unit
  - Modification of a tank management practice
  - Management of different wastes in tanks that do not require additional or different management practices, tank design, different fire protection specifications, or significantly different tank treatment process than authorized in the permit, except as provided on Exhibit 4-1
- Surface Impoundments
  - Modification of a surface impoundment unit without increasing the facility's surface impoundment storage or treatment capacity and without modifying the unit's liner, leak detection system, or leachate collection system
  - Modification of a surface impoundment management practice

### EXHIBIT 4-3 (Cont'd.)

- Treatment, storage, or disposal of different wastes in surface impoundments that do not require additional or different management practices or different design of the liner or leak detection system than authorized in the permit.
- Changes in response action plan, except as provided on Exhibit 4-6

- Landfills

- Modification of a landfill unit without changing a liner, leachate collection system, leachate detection system, run-off control, or final cover system
- Modification of a landfill management practice
- Landfill different wastes that do not require additional or different management practices, different design of the liner, leachate collection system, or leachate detection system
- Changes in response action plan not listed on Exhibit 4-6

- Incinerators

- Changes to increase by up to 25% any of the following limits authorized in the permit: a thermal feed rate limit, a feedstream feed rate limit, a chlorine/chloride feed rate limit, a metal feed rate limit, or an ash feed rate limit. The regulator will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means
- Modification of an incinerator unit in a manner that would not likely affect the capability of the unit to meet the regulatory performance standards but which would change the operating conditions or monitoring requirements specified in the permit. The regulator may require a new trial burn to demonstrate compliance with the regulatory performance standards
- Modification of any other operating condition or any inspection or recordkeeping requirement specified in the permit
- Burning different wastes if the waste does not contain a POHC that is more difficult to burn than authorized by the permit and if burning of the waste does not require compliance with different regulatory performance standards than specified in the permit

### EXHIBIT 4-3 (Cont'd.)

- Modification of the trial burn plan or any of the permit conditions applicable during the shakedown period for determining operational readiness after construction, the trial burn period, or the period immediately following the trial burn
- Containment Buildings
  - Modification or addition of containment building units resulting in up to 25% increase in the facility's containment building storage or treatment capacity
  - Modification of a containment building unit or secondary containment system without increasing the capacity of the unit
  - Modification of a containment building management practice
  - Storage or treatment of different wastes in containment buildings that do not require additional or different management practices
- Corrective Action
  - Approval of a temporary unit or time extension for a temporary unit pursuant to §264.553



**EXHIBIT 4-4**  
**REGULATORY REQUIREMENTS FOR CLASS 2 PERMIT MODIFICATION REQUESTS (40 CFR 270.42)**

Type of Requirement	Requirements
Contents of Permit Modification Request	Submit a permit modification request to the regulator that describes the exact change to be made to the permit conditions and supporting documents referenced by the permit [40 CFR 270.42(b)(1)(i)], identifies the modification as a Class 1 modification for which the permittee elects to follow Class 2 procedures [40 CFR 270.42(a)(3)] or a Class 2 modification [40 CFR 270.42(b)(1)(ii)], explains why the modification is needed [40 CFR 270.42(b)(1)(iii)], and provides the applicable information required by 40 CFR part 270 permit application regulations [270.42(b)(1)(iv)]. (The exhibits in Chapter 2 list the information required by these regulations.)
Public Notice	Within 7 days before or after the date of submission of the modification request, send a notice of the request to all persons on the facility mailing list maintained by the regulator in accordance with 40 CFR 124.10(c)(viii) (or the equivalent State regulation), the appropriate units of State and local government, as specified in 40 CFR 124.10(c)(ix) (or the equivalent State regulation), and a major local newspaper of general circulation for publication [40 CFR 270.42(b)(2)]. The notice must include announcement of a 60-day comment period and the name and address of a regulatory agency contact to whom comments must be sent; announcement of the date, time and place for a public meeting on the modification request, the name and telephone number of the permittee's contact person, the name and telephone number of a regulatory agency contact person; location where copies of the modification request and any supporting documents can be viewed and copied; and the following statement, "The permittee's compliance history during the life of the permit being modified is available from the Agency contact person." Evidence of the mailing and publication of the notice must be provided to the regulator [40 CFR 270.42(b)(2)(i) - (vi)].
Public Access	Place a copy of the permit modification request and supporting documents in a location accessible to the public in the vicinity of the permitted facility [40 CFR 270.42(b)(3)].
Public Meeting	Hold a public meeting no earlier than 15 days after the publication of the notice in a major local newspaper (see the requirements associated with Public Notice above) and no later than 15 days before the close of the 60-day public comment period (see the requirements associated with the Public Comment Period below). The meeting must be held to the extent practicable in the vicinity of the permitted facility [40 CFR 270.42(b)(4)].
Public Comment Period	The public must be provided 60 days to comment on the modification request. The public comment period begins on the date the permittee publishes the notice in the local newspaper [40 CFR 270.42(b)(5)].

**EXHIBIT 4-5**  
**CLASS 2 PERMIT MODIFICATION REQUIREMENTS APPLICABLE TO REGULATORS (40 CFR 270.42)**

Situation	Regulator Requirements
Permittee has requested a Class 2 permit modification	<p>No later than 90 days after the receipt of the request, the regulator must:</p> <ul style="list-style-type: none"> <li>• approve the modification, with or without changes, and modify the permit accordingly;</li> <li>• deny the request;*</li> <li>• determine that the modification request must follow the procedures for a Class 3 modification;**</li> <li>• approve the request, with or without changes, as a temporary authorization having a term of up to 180 days***; or</li> <li>• notify DOE that he or she will decide on the request within the next 30 days [40 CFR 270.42(b)(6)(i)].</li> </ul>
Regulator has notified DOE that he or she will take an additional 30 days to decide on the Class 2 permit modification request	<p>No later than 120 days after the receipt of the request, the regulator must:</p> <ul style="list-style-type: none"> <li>• approve the modification, with or without changes, and modify the permit accordingly;</li> <li>• deny the request;*</li> <li>• determine that the modification request must follow the procedures for a Class 3 modification;** or</li> <li>• approve the request, with or without changes, as a temporary authorization having a term of up to 180 days***.</li> </ul> <p>Failure of the regulator to make one these decisions within 120 days automatically authorizes DOE to conduct the activities described in the modification request for up to 180 days.***</p>
All situations	The regulator must consider all written comments submitted to the regulatory agency during the public comment period and must respond in writing to all significant comments in conjunction with his or her decision.

\* The regulator may deny or change the terms of a Class 2 permit modification request because: the modification request is incomplete; the requested modification does not comply with the appropriate requirements of 40 CFR part 264 or other applicable requirements; or the conditions of the modification fail to protect human health and the environment.

\*\* The regulator will require the modification to follow the procedures for a Class 3 modification request if there is significant public concern about the proposed modification, or the complex nature of the change calls for the more extensive procedures of Class 3 modification.

\*\*\* The regulator may renew a temporary authorization for an additional 180-day term. Submodule 4-1-4 contains additional information applicable to temporary and automatic authorization.

Notification of Temporary Authorization to Persons on the Facility Mailing List is Required

However, if the regulator does not approve or deny the modification request by the date 50 days before the expiration of the automatic or temporary authorization period, DOE has seven days to take the following actions.

DOE must send a notification to persons on the facility mailing list, and make a reasonable effort to notify other persons who submitted comments on the modification request that:

- DOE has been authorized temporarily to conduct the activities described in the permit modification request, and
- unless the regulator acts to approve or deny the request by the end of the authorization period, DOE will receive permanent authorization to conduct the activities described in the modification request for the life of the permit [40 CFR 270.42(b)(6)(iv)(A)].

DOE's failure to notify the public by the dates specified above defers the effective date of the permanent authorization until 50 days after DOE notifies the public [40 CFR 270.42(b)(6)(iv)(B)].

Automatic or Temporary Authorization Can Become Permanent

If the regulator does not finally approve or deny a modification request before the end of the automatic or temporary authorization period (or reclassify the modification to a Class 3), DOE is authorized to conduct the activities described in the permit modification request for the life of the permit unless the permit is modified later. These activities must be conducted as described in the permit modification request and must be in compliance with all appropriate standards of 40 CFR 265 [40 CFR 270.42(b)(6)(v)].

Under certain conditions, activities normally requiring Class 2 modifications to RCRA permits can proceed temporarily without prior public notice or comment. Submodule 4-1-4 describes the conditions under which the regulator may grant DOE such temporary authorizations.

Construction May Begin 60 Days After a Permit Modification Request is Submitted

DOE may perform any construction associated with a Class 2 permit modification request beginning 60 days after the submission of the request unless the regulator establishes a later date for commencing construction and informs the permittee in writing before day 60 [40 CFR 270.42(b)(8)].

In the Federal RCRA regulations, a table comprising Appendix I to 40 CFR 270.42 lists possible actions requiring

permit modifications. The modification associated with each action is assigned to Class 1, 2, or 3.

DOE Must Satisfy Similar Requirements for Class 2 and Class 3 Modifications

Exhibit 4-6 lists the actions requiring Class 3 permit modifications included in Appendix I to 40 CFR 270.42. The regulatory requirements applicable to permittees associated with Class 3 permit modifications are listed on Exhibit 4-7. The exhibit shows that DOE must satisfy basically the same requirements for Class 3 modifications as for Class 2 modifications: contents of the permit modification request, public notice, public access, public meetings and a public comment period.

However, Administrative Procedures are Different

After the conclusion of the public comment period, the regulator must grant or deny the permit modification request according to the administrative procedures of 40 CFR 124. In addition, the regulator must consider and respond to all significant comments received during the public comment period.

***For more information on the administrative permit process, go to Chapter 3.***

See Submodule 4-1-4 for Temporary Authorization Without Prior Public Notice or Comment

Under certain conditions, activities normally requiring Class 3 modifications to RCRA permits can proceed temporarily without prior public notice or comment. Submodule 4-1-4 describes the conditions under which the regulator may grant DOE such temporary authorizations.



**EXHIBIT 4-6**  
**ACTIONS REQUIRING CLASS 3 PERMIT MODIFICATIONS**

- General Permit Provisions
  - Extension of a final compliance date
- Groundwater Protection
  - Changes in indicator parameters, hazardous constituents, or concentration limits (including ACLs) as specified in the groundwater protection standard
  - Addition of compliance monitoring program as required by 40 CFR 264.98(g)(4) and 264.99
  - Addition of a corrective action program as required by 40 CFR 264.99(i)(2) and 264.100
- Closure
  - Creation of a new landfill unit as part of closure
  - Addition of the following new units to be used temporarily for closure activities
    - Surface impoundments
    - Incinerators
    - Waste piles that do not comply with 40 CFR 264.250(c)
- Post-Closure
  - Reduction in the post-closure care period
- Containers
  - Modification or addition of container units resulting in greater than 25% increase in the facility's container storage capacity, except as provided on Exhibit 4-1
  - Storage of different wastes in containers that require additional or different management practices from those authorized in the permit, except as provided on Exhibits 4-1 and 4-3

## EXHIBIT 4-6 (Cont'd.)

- Tanks
  - Modification or addition of tank units resulting in greater than 25% increase in the facility's tank capacity, except as provided on Exhibits 4-1 and 4-3
  - Management of different wastes in tanks that require additional or different management practices, tank design, different fire protection specifications, or significantly different tank treatment process from that authorized in the permit, except as provided on Exhibit 4-1
- Surface Impoundments
  - Modification or addition of surface impoundment units that result in increasing the facility's surface impoundment storage or treatment capacity
  - Replacement of a surface impoundment unit
  - Treatment, storage, or disposal of different wastes in surface impoundments that require additional or different management practices or different design of the liner or leak detection system than authorized in the permit
  - Changes in response action plan
    - Increase in action leakage rate
    - Change in a specific response reducing its frequency or effectiveness
- Landfills
  - Modification or addition of landfill units that result in increasing the facility's disposal capacity
  - Replacement of a landfill
  - Addition or modification of a liner, leachate collection system, leachate detection system, run-off control, or final cover system
  - Landfill different wastes that require additional or different management practices, different design of the liner, leachate collection system, or leachate detection system
  - Changes in response action plan
    - Increase in action leakage rate
    - Change in a specific response reducing its frequency or effectiveness

## EXHIBIT 4-6 (Cont'd.)

- Incinerators

- Changes to increase by more than 25% any of the following limits authorized in the permit: a thermal feed rate limit, a feedstream feed rate limit, a chlorine/chloride feed rate limit, a metal feed rate limit, or an ash feed rate limit. The regulator will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means
- Modification of an incinerator unit by changing the internal size or geometry of the primary or secondary combustion units, by adding a primary or secondary combustion unit, by substantially changing the design of any component used to remove HCl/Cl<sub>2</sub>, metals, or particulate from the combustion gases, or by changing other features of the incinerator that could affect its capability to meet the regulatory performance standards. The regulator will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means
- Operating requirements
  - Modification of the limits specified in the permit for minimum or maximum combustion gas temperature, minimum combustion gas residence time, oxygen concentration in the secondary combustion chamber, flue gas carbon monoxide and hydrocarbon concentration, maximum temperature at the inlet to the particulate matter emission control system, or operating parameters for the air pollution control system. The regulator will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means.
  - Modification of any stack gas emission limits specified in the permit, or modification of any conditions in the permit concerning emergency shutdown or automatic waste feed cutoff procedures or controls
- Burning different wastes if the waste contains a POHC that is more difficult to burn than authorized by the permit or if burning of the waste requires compliance with different regulatory performance standards than specified in the permit. The regulator will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means

- Containment Buildings

- Modification or addition of containment building units resulting in greater than 25% increase in the facility's containment building storage or treatment capacity
- Storage or treatment of different wastes in containment buildings that require additional or different management practices

- Corrective Action

- Approval of a corrective action management unit (CAMU) pursuant to 40 CFR 264.552

**EXHIBIT 4-7**  
**REGULATORY REQUIREMENTS FOR CLASS 3 PERMIT MODIFICATION REQUESTS (40 CFR 270.42)**

Type of Requirement	Requirements (Citation)
Contents of Permit Modification Request	Submit a permit modification request to the regulator that describes the exact change to be made to the permit conditions and supporting documents referenced by the permit [40 CFR 270.42(c)(1)(i)], identifies the modification as a Class 3 modification [270.42(c)(1)(ii)], explains why the modification is needed [40 CFR 270.42(c)(1)(iii)], and provides the applicable information required by 40 CFR part 270 permit application regulations [40 CFR 270.42(c)(1)(iv)]. (The exhibits in Chapter 2 list the information required by these regulations.)
Public Notice	Within 7 days before or after the date of submission of the modification request, send a notice of the request to all persons on the facility mailing list maintained by the regulator in accordance with 40 CFR 124.10(c)(viii) (or the equivalent State regulation), the appropriate units of State and local government, as specified in 40 CFR 124.10(c)(ix) (or the equivalent State regulation), and a major local newspaper of general circulation for publication [40 CFR 270.42(c)(2)]. The notice must include announcement of a 60-day comment period and the name and address of a regulatory agency contact to whom comments must be sent; announcement of the date, time and place for a public meeting on the modification request, the name and telephone number of the permittee's contact person, the name and telephone number of a regulatory agency contact person; location where copies of the modification request and any supporting documents can be viewed and copied; and the following statement, "The permittee's compliance history during the life of the permit being modified is available from the Agency contact person." Evidence of the mailing and the publication must be provided to the regulator [40 CFR 270.42(c)(2)(i) - (vi)].
Public Access	Place a copy of the permit modification request and supporting documents in a location accessible to the public in the vicinity of the permitted facility [40 CFR 270.42(c)(3)].
Public Meeting	Hold a public meeting no earlier than 15 days after the publication of the notice in a major local newspaper (see the requirements associated with Public Notice above) and no later than 15 days before the close of the 60-day public comment period (see the requirements associated with the Public Comment Period below). The meeting must be held to the extent practicable in the vicinity of the permitted facility [40 CFR 270.42(c)(4)].
Public Comment Period	The public must be provided at least 60 days to comment on the modification request. The public comment period begins on the date the permittee publishes the notice in the local newspaper [40 CFR 270.42(c)(5)].



Permit Modifications Not  
Listed in Regulations

Provide the Regulator With  
Necessary Information to  
Support Your Request

The Regulator Is Required  
to Use These Criteria

### Other Modifications

For actions requiring a permit modification that is not listed on the table comprising Appendix I to 40 CFR 270.42, DOE may:

- submit a Class 3 permit modification request to the regulator, or
- request a determination by the regulator that the modification should be reviewed and approved as a Class 1 or Class 2 modification.

If DOE requests that a modification be reviewed and approved as a Class 1 or Class 2 modification, DOE must provide the regulator with the necessary information to support the requested classification. The regulator is required to make the determination as promptly as practicable using the following criteria [40 CFR 270.42(d)(2)].

- The regulator must consider the similarity of the requested modification to other modifications listed in Appendix I to 40 CFR 270.42.
- Class 1 modifications apply to minor changes that keep the permit current with routine changes to the facility or its operation. These changes do not substantially alter the permit conditions or reduce the capacity of the facility to protect human health or the environment [40 CFR 270.42(d)(2)(i)].
- Class 2 modifications apply to changes that are necessary to enable a permittee to respond, in a timely manner to
  - common variations in the types and quantities of the wastes managed under the facility permit,
  - technological advancements, and
  - changes necessary to comply with new regulations, where the changes can be implemented without substantially changing design specifications or management practices in the permit [40 CFR 270.42(d)(2)(ii)].

- Class 3 modifications substantially alter the facility or its operation [40 CFR 270.42(d)(2)(iii)].

#### Temporary Authorizations Not Requiring Prior Public Notice and Comment

The regulator may grant DOE permission to temporarily proceed with activities that would normally require Class 2 or Class 3 modifications to a RCRA permit without prior public notice and comment. Such temporary authorizations may not exceed a term of 180 days. Exhibit 4-8 lists the regulatory requirements applicable to these authorizations [40 CFR 270.42(e)].

DOE has used temporary authorizations to expedite implementation of new activities at permitted facilities and to provide an efficient mechanism to conduct new waste management activities of limited duration. For example:

A Temporary Authorization can Expedite Implementation of New Activities

- DOE has received temporary authorization to perform soil vapor extraction and other remediation activities at units that are currently permitted only for pump and treat groundwater remediation systems at the Savannah River Site. The temporary authorization allowed DOE to commence remediation while the permit modification request was prepared, reviewed, and approved.
- DOE received temporary authorization to treat mixed waste (i.e., size reduction of filter paper rolls in preparation for incineration) at a storage unit at the Savannah River Site. This activity was completed within 180 days, so no permanent permit modification was needed (see Exhibit 4-8).

Activities of Limited Duration Can be Performed Under a Temporary Authorization

**EXHIBIT 4-8**  
**REGULATORY REQUIREMENTS FOR CLASS 2 AND CLASS 3 TEMPORARY PERMIT**  
**MODIFICATIONS NOT REQUIRING PRIOR PUBLIC NOTICE AND COMMENT [40 CFR 270.42(e)]**

Type of Requirement	Requirements
Criteria for Class 2 Modifications	<p>The temporary authorization must be necessary to achieve one of several specific objectives before action is likely to be taken on a modification request. Objectives include to:</p> <ul style="list-style-type: none"> <li>• Facilitate timely implementation of closure or corrective action activities;</li> <li>• Allow treatment or storage in tanks, containers, or containment buildings in accordance with 40 CFR part 268;</li> <li>• Prevent disruption of ongoing waste management activities;</li> <li>• Enable DOE to respond to sudden changes in the types or quantities of the wastes managed under the facility permit; or</li> <li>• Facilitate other changes to protect human health and the environment.</li> </ul> <p>The activities to be authorized must be in compliance with 40 CFR part 264.</p>
Criteria for Class 3 Modifications	<p>The temporary authorization must be necessary to:</p> <ul style="list-style-type: none"> <li>• Facilitate timely implementation of closure or corrective action activities; or</li> <li>• Allow treatment or storage in tanks, containers, or containment buildings in accordance with 40 CFR part 268;</li> </ul> <p>Or the temporary authorization must be necessary to:</p> <ul style="list-style-type: none"> <li>• Prevent disruption of ongoing waste management activities and provide improved management or treatment of a hazardous waste already listed in the facility permit;</li> <li>• Enable DOE to respond to sudden changes in the types or quantities of the wastes managed under the facility permit and provide improved management or treatment of a hazardous waste already listed in the facility permit; or</li> <li>• Facilitate other changes to protect human health and the environment and provide improved management or treatment of a hazardous waste already listed in the facility permit.</li> </ul> <p>The activities to be authorized must be in compliance with 40 CFR part 264.</p>
Contents of Temporary Authorization Requests	<p>The temporary authorization request must include:</p> <ul style="list-style-type: none"> <li>• A description of the activities to be conducted under the temporary authorization;</li> <li>• An explanation of why the temporary authorization is necessary; and</li> <li>• Sufficient information to ensure compliance with 40 CFR part 264 standards.</li> </ul>

### EXHIBIT 4-8 (Cont'd.)

Type of Requirement	Requirements
Notice	DOE must send a notice of the temporary authorization request to all persons on the facility mailing list maintained by the regulator and to appropriate units of State and local governments as specified in 40 CFR 124.10(c)(ix). The notification must be made within seven days of submitting the authorization request.
Term of Temporary Authorizations	<p>Temporary authorizations must have a term of not more than 180 days. A temporary authorization may be reissued for one additional 180-day term provided that DOE has requested a Class 2 or 3 permit modification for the activity covered in the temporary authorization, and:</p> <ul style="list-style-type: none"><li>• The reissued temporary authorization constitutes the regulator's decision on the Class 2 permit modification; or</li><li>• The regulator determines that the reissued temporary authorization involving a Class 3 permit modification request is warranted to allow the authorized activities to continue while Class 3 permit modification procedures continue.</li></ul>

## MODULE 4-2: Modifications/Terminations Initiated by the Regulator

The regulator, or any person or organization, may initiate an action to modify or revoke a RCRA permit.

If the regulator decides to pursue a modification or revocation requested by a person or organization other than the permittee, it becomes a regulator-initiated modification or revocation.

Difference Between  
Modification and  
Revocation

- When a RCRA permit is modified, only the conditions subject to the modification are reopened.
- When a RCRA permit is revoked, the entire permit is reopened and subject to revision, and the permit is reissued for a new term.

Suitability of Location May  
Not Be Considered

The regulator may not consider suitability of the facility location at the time of permit modification or revocation and reissuance unless new information or standards indicate that a threat to human health and the environment exists which was unknown at the time of permit issuance. Causes for permit modification are listed on Exhibit 4-9.

The following are causes for terminating a permit during its term (or for denying a permit renewal):

Causes for Termination

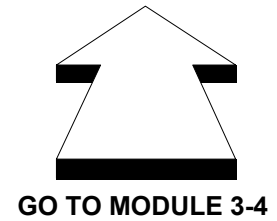
- noncompliance with any condition of the permit;
- failure in the application or during the permit issuance process to disclose fully all relevant facts, or misrepresentation of any relevant facts at any time; or
- a determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by termination.

**EXHIBIT 4-9**  
**CAUSES FOR PERMIT MODIFICATION INITIATED BY THE REGULATOR (40 CFR 270.41)**

<b>Cause</b>	<b>Regulation</b>	<b>Citation</b>
Alterations	There are material and substantial alterations or additions to the permitted facility or activity which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit.	270.41(a)(1)
Information	The regulator has received information (other than revised regulations, guidance, or test methods) not available at the time of permit issuance that would have justified the application of different permit conditions at the time of issuance.	270.41(a)(2)
New Statutory Requirements or Regulations	The standards or regulations on which the permit was based have been changed by statute, through promulgation of new or amended standards or regulations, or by judicial decision after the permit was issued.	270.41(a)(3)
Compliance Schedules	The regulator determines good cause exists for modification of a compliance schedule, such as an act of God, strike, flood, or materials shortage or other events over which the permittee has little or no control and for which there is no reasonably available remedy.	270.41(a)(4)

In terminating any permit, the regulator must follow applicable procedures in 40 CFR 124.

***For information on the administrative process applicable to the termination of RCRA permits, go to Module 3-4.***



## **REFERENCES**

### **Statutes**

Resource Conservation and Recovery Act, P.L. 94-580, as amended.

### **Regulations**

40 CFR Part 124, "EPA Procedures for Decisionmaking."

40 CFR Part 264, "EPA Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities."

40 CFR Part 265, "EPA Interim Status Standards for Owners and Operators of Hazardous Waste Facilities."

40 CFR Part 270, "EPA Regulations for Federally Administered Hazardous Waste Permit Programs."

U.S. Department of Energy, Office of Environmental Policy and Assistance, "Transfer of Environmental Permits After the Sale or Transfer of DOE Property" [EH-413-061/1195 (November 1995)].



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# Chapter 5

## Special Forms of Permits

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# **SPECIAL FORMS OF PERMITS**

## **INTRODUCTION**

This chapter addresses special forms of RCRA permits including emergency permits; research, development, and demonstration (RD&D) permits; and post-closure permits.

Emergency permits and RD&D permits, if applicable to the waste management activity being performed, may be used in place of a hazardous waste treatment, storage or disposal permit. Post-closure permits on the other hand, are required during the post-closure care period at hazardous waste management facilities where wastes will remain in place after closure. Post-closure permits do not substitute for hazardous waste treatment, storage or disposal permits; they are applicable during a different phase of a unit's operation.

The permit modification provisions described in Chapter 4, and the permit expiration and continuation provisions described in Chapter 2, are applicable to post-closure permits as well as to operating permits. These provisions are not applicable to emergency permits or to RD&D permits because of the limited duration of these permits.

For the reasons explained in the bullets below, special forms of permits that are not discussed in detail in this chapter include: permits by rule, hazardous waste incinerator permits, permits for land treatment demonstrations using field test or laboratory analyses, interim permits for underground injection control wells, and permits for boilers and industrial furnaces burning hazardous waste.

- The permit by rule provisions of 40 CFR 270.60 eliminate the need for some facilities to submit full RCRA permit applications. These provisions apply to the following facility types, none of which is a facility type for which DOE would seek a RCRA permit:
  - Underground injection wells with permits under the Safe Drinking Water Act;
  - Publicly owned treatment works (POTWs) with National Pollutant Discharge Elimination System (NPDES) permits under the Clean Water Act; and
  - Ocean disposal barges or vessels with ocean dumping permits under the Marine Protection, Research, and Sanctuaries Act.

DOE would not seek a RCRA permit for a UIC well because DOE neither owns nor operates active hazardous waste or RMW underground injection wells. DOE would not seek a RCRA permit for a POTW because the definition of POTW excludes Federal agencies as owners of such facilities. Also, it is unlikely that

DOE would operate a POTW owned by a State or municipality. DOE would not seek an ocean dumping permit because DOE does not own or operated any ocean disposal barges or vessels.

- Special forms of hazardous waste incinerator permits (40 CFR 270.62) were discussed in Submodule 2-2-2 of Chapter 2.
- Permits for land treatment demonstrations using field test or laboratory analyses (40 CFR 270.63), interim permits for underground injection control wells (40 CFR 270.64), and permits for boilers and industrial furnaces burning hazardous waste (40 CFR 270.66) are not discussed in this chapter because they are not applicable to the hazardous waste management units owned by DOE.

## MODULE 5-1: Emergency Permits

Emergency Permit  
Addresses an Imminent and  
Substantial Threat to  
Human Health or the  
Environment

A regulator may issue an emergency permit to a DOE facility to address an imminent and substantial threat to human health or the environment. The permit may be issued to:

- a non-permitted facility to allow treatment, storage, or disposal of a hazardous waste, or
- a permitted facility to allow treatment, storage, or disposal of a hazardous waste not covered by an effective permit.

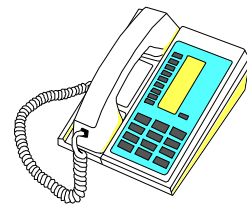
Emergency Permit Only  
Lasts for 90 Days

The permit enables the facility to treat, store or dispose of hazardous waste for up to 90 days. Exhibit 5-1 presents the regulatory requirements applicable to emergency permits.

At DOE sites, emergency permits are used to address immediate safety problems. For example, DOE's Savannah River Site obtained an emergency permit to allow a vendor to come onsite and deactivate some ether, picric acid, and other chemicals that had begun to form peroxides presenting an explosion hazard. Emergency permits may also be used to detonate munitions that are too dangerous to be moved to interim status or permitted open burning/open detonation units.

If the Situation Could Take  
Longer Than 90 Days to  
Address, an Exclusion From  
RCRA Permitting May be  
Authorized

An emergency permit cannot be used to address an imminent and substantial threat to human health and the environment if the actions required to address the threat will take more than 90 days to complete. DOE managers responsible for responding to imminent and substantial threats to human health and the environment that may require more than 90 days to address should contact the appropriate regulatory agency to determine if the situation meets the conditions for an exclusion from RCRA permitting under 40 CFR 270.1(c)(3). This





**EXHIBIT 5-1**  
**REGULATORY REQUIREMENTS APPLICABLE TO**  
**EMERGENCY PERMITS (40 CFR 270.61)\***

<b>Type of Requirement</b>	<b>Requirement (Citation)</b>
Criterion for Issuance of an Emergency Permit	Notwithstanding any other provision in 40 CFR part 270 or part 124, the regulator may issue an emergency permit in the event that he or she finds an imminent and substantial endangerment to human health or the environment [40 CFR 270.61(a)].
Form of Permit	The permit may be oral or written. If oral, it must be followed in five days by a written emergency permit [40 CFR 270.61(b)(1)].
Duration/Term of Permit	The permit may not exceed 90 days in duration [40 CFR 270.61(b)(2)]. It may be terminated by the regulator at any time if he or she determines that termination is appropriate to protect human health and the environment [40 CFR 270.61(b)(4)].
Contents of Permit	The permit must clearly specify the hazardous wastes to be received, and the manner and location of their treatment, storage or disposal [270.61(b)(3)]. It must incorporate, to the extent possible and consistent with the emergency situation, all applicable requirements of 40 CFR parts 270 and 264 [40 CFR 270.61(b)(6)].
Public Notice	The emergency permit must be accompanied by a public notice published under 40 CFR 124.11(b) including: the name and address of the office granting the emergency authorization; the name and location of the permitted HWM facility; a brief description of the wastes involved; a brief description of the action authorized and reasons for authorizing it; and the duration of the emergency permit [40 CFR 270.61(b)(5)].

- \* An emergency permit may be issued to a non-permitted facility to allow treatment, storage, or disposal of a hazardous waste, or to a permitted facility to allow treatment, storage, or disposal of a hazardous waste not covered by an effective permit.

exclusion relieves persons from obtaining a RCRA permit for treatment or containment activities taken during immediate response to any of the following situations:

- A discharge of hazardous waste;
- An imminent and substantial threat of a discharge of hazardous waste; and
- A discharge of a material which, when discharged, becomes a hazardous waste.

Once the immediate response is completed, however, RCRA permitting requirements are applicable [40 CFR 270.1(c)(3)(ii)].

## **MODULE 5-2: Research, Development, and Demonstration (RD&D) Permits**

RD&D Permits Are for  
Technologies/Processes for  
Which Permit Standards  
Have Not Been Issued

Exhibit 5-2 summarizes the regulatory requirements applicable to RD&D permits. In practice, these permits are rarely used because they are applicable to innovative and experimental hazardous waste treatment technologies or processes for which permit standards have not been promulgated (see Exhibit 5-2).

- Many innovative and experimental technologies or processes involve thermal destruction; however, regulators may decline to issue RD&D permits for thermal destruction technologies because they believe that the incinerator or boilers and industrial furnaces permit standards are applicable to the use of these technologies or processes.
- Some innovative and experimental technologies or processes occur in tanks or containers. Consequently, some regulators may believe that the permit standards applicable to tanks or containers are applicable to the use of innovative and experimental technologies or processes occurring in tanks or containers.

Time Limit

Also, the one-year duration of an RD&D permit serves as an impediment to its wider use, even though the permit can be renewed up to three times (see Exhibit 5-2).

**EXHIBIT 5-2**  
**REGULATORY REQUIREMENTS APPLICABLE TO RESEARCH,  
DEVELOPMENT, AND DEMONSTRATION (RD&D) PERMITS (40 CFR 270.65)**

Type of Requirement	Requirement
Criterion for Issuance of an RD&D Permit	RD&D permits may be issued for any hazardous waste treatment facility which proposes to utilize an innovative and experimental hazardous waste treatment technology or process for which permit standards have not been promulgated [40 CFR 270.65(a)].
Permit Application and Issuance Requirements	Permit application and permit issuance requirements in 40 CFR parts 124 and 260 may be modified or waived except that there may be no modification or waiver of regulations regarding financial responsibility (including insurance)* or of procedures regarding public participation [40 CFR 270.65(b)].
Contents of Permit	<p>The permit must include such terms and conditions as will assure protection of human health and the environment [40 CFR 270.65(a)]. In particular, the permit must:</p> <ul style="list-style-type: none"> <li>• Provide for the construction of necessary facilities [40 CFR 270.65(a)(1)];</li> <li>• Provide for the receipt and treatment by the facility of only those types and quantities of hazardous waste which the regulator deems necessary for purposes of determining the efficacy and performance capabilities of the technology or process and the effects of such technology or process on human health and the environment [40 CFR 270.65(a)(2)]; and</li> <li>• Include requirements that the regulator deems necessary to protect human health and the environment (including, but not limited to requirements regarding monitoring, operation, financial responsibility,* closure, and remedial action), and such requirements as the regulator deems necessary regarding testing and providing of information to the regulator with respect to the operation of the facility [40 CFR 270.65(a)(3)].</li> </ul>
Duration/Term of Permit	<p>The permit must provide for the operation of the facility for not longer than one year (270.65(a)(1)). However, the permit may be renewed up to three times. Each renewal must not be for a period of more than one year [40 CFR 270.65(d)].</p> <p>The regulator may order an immediate termination of all operations at the facility at any time he or she determines that termination is necessary to protect human health and the environment [40 CFR 270.65(c)].</p>

\* DOE is exempt from financial responsibility requirements.

## MODULE 5-3: Post-Closure Permits

Post-Closure Permits  
Address Post-Closure  
Care

DOE must obtain a RCRA post-closure permit for the performance of post-closure care at all currently operating permitted and interim status units where wastes will remain in place after closure. These units are listed below.

A post-closure permit details the requirements for the performance of post-closure care and contains all of the conditions applicable to the permit, such as its duration and recordkeeping requirements [40 CFR 270.32(a)]. Post-closure care encompasses all monitoring and maintenance activities that must be performed during the post-closure period (40 CFR 264.117-264.120, 40 CFR 265.117-265.120).

Post-Closure Care is  
Required at Currently  
Operating Units

Post-closure care must be performed at currently operating:

- hazardous waste landfills, disposal surface impoundments, and land treatment units; and
- tank systems, drip pads, waste piles, surface impoundments, and miscellaneous units (e.g., open burning/open detonation units) where all waste residues and contaminated soils, materials, components, subsoils, or structures cannot be removed or decontaminated [40 CFR 264.110, 40 CFR 265.110, 40 CFR 264.603, 40 CFR 270.14(b)(13)].

Post-Closure Care is  
Required at Closed Units

Post-closure care and a post-closure permit are required for closed units where wastes remained in place after closure if such units received waste after July 26, 1982, or certified closure after January 26, 1983. Post-closure permits are also required for interim status units where wastes remain in place after closure if:

- closure occurs before an operating permit is issued, or
- an operating permit is denied [40 CFR 270.1(c)].

Regulatory  
Requirements  
Applicable to Post-  
Closure Permit  
Applications are Not  
Detailed

Regulations applicable to the contents of post-closure permit applications are vague, specifying only that they contain all of the necessary information to address

requirements applicable to groundwater monitoring, unsaturated zone monitoring, corrective action, and post-closure care requirements [40 CFR 270.1(c)]. Exhibit 5-3 lists the information that should, at a minimum, be included in post-closure permit applications to address these requirements.

Additional information on post-closure permits is available in the DOE Information Brief entitled RCRA Post-Closure Permits (EH-231-021/0293).

EPA and Authorized States  
Are Finding it Difficult to  
Issue Post-Closure Permits

EPA and authorized States do not have sufficient resources to issue post-closure permits to the thousands of facilities for which they are required. Given this situation, EPA's strategy has been to prioritize facilities for post-closure permitting.

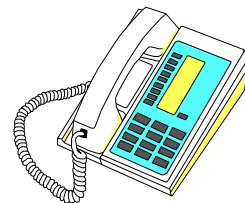


EPA Has Proposed to Use  
Alternative Authorities to  
Impose Post-Closure Care  
Requirements

On November 8, 1994, EPA proposed to replace the current requirement that interim status hazardous waste management facilities that close without obtaining an operating permit apply for and receive a post-closure permit (59 FR 55778-55793). The alternative provisions would allow regulators to either issue post-closure permits to these facilities or to use alternative authorities (e.g., RCRA § 3008(h) orders and CERCLA §§ 104, 106 and 122 orders) to impose post-closure requirements. In comments submitted to EPA on the proposed rule, DOE supported this change.

Find Out What the  
Regulator Expects in a Post-  
Closure Permit Application.

DOE managers responsible for units that require post-closure permits should contact their regulators to determine if the regulators want to negotiate post-closure permit requirements. If so, DOE managers should inquire as to when a post-closure permit application should be submitted and communicate to the responsible regulatory agency the



**EXHIBIT 5-3**  
**MINIMUM INFORMATION REQUIRED IN RCRA**  
**POST-CLOSURE PERMIT APPLICATIONS**  
**SUBMITTED BY DOE FACILITIES\***

Information Required	Citation (40 CFR)
Copy of the post-closure inspection schedule	270.14(b)(5)
Floodplain information	270.14(b)(11)(iii-iv)
Copy of the post-closure plan	270.14(b)(13)
Documentation of the notice of former hazardous waste activity in the deed to the land	270.14(b)(14)
Applicable groundwater monitoring data and information demonstrating compliance with requirements for detection monitoring, compliance monitoring, and corrective action	270.14(c)
Information on solid waste management units and corrective action for releases from those units	264.101
Information on the potential for the public to be exposed to hazardous wastes or hazardous constituents from releases from hazardous waste management units	270.10(j)

\* This exhibit is based on a Memorandum on Post-Closure Permit Part B Information Requirements from the Director of the Permits and State Programs Division, U.S. Environmental Protection Agency, to Waste Management Division Directors, Regions I-X, U.S. Environmental Protection Agency, November 18, 1985.

Department's suggestions for the contents of the permit application. (DOE managers should seek concurrence from the responsible regulatory agency regarding information that should be submitted in addition to the information listed on Exhibit 5-3.)



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## **REFERENCES**

### **Statutes**

Comprehensive Environmental Response, Compensation, and Liability Act, P.L. 96-510, as amended.

Clean Water Act, as amended by the Federal Water Pollution Control Act Amendments of 1972, P.L. 92-500, as amended.

Marine Protection, Research, and Sanctuaries Act of 1972, P.L. 92-532, as amended.

Resource Conservation and Recovery Act, P.L. 94-580, as amended.

Safe Drinking Water Act, P.L. 93-523, as amended.

### **Regulations**

40 CFR Part 264, "EPA Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities."

40 CFR Part 265, "EPA Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Units."

40 CFR Part 270, "EPA Administered Permit Programs: The Hazardous Waste Management Program."

### **Federal Register**

59 FR 55778, "Proposed rule and request comment: Standards Applicable to Owners and Operators of Closed and Closing Hazardous Waste Management Facilities; Post-Closure Permit Requirement; Closure Process; State Corrective Action Enforcement Authority" (November 8, 1994).

### **Other Publications**

U.S. Department of Energy, Office of Policy and Assistance, "RCRA Post-Closure Permits" [DOE/EH-231-021/0293 (February 1993)].

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# Chapter 6

## Federal/State Authority and Implementation

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# FEDERAL/STATE AUTHORITY AND IMPLEMENTATION

## INTRODUCTION

Chapter 6 briefly describes the RCRA provisions whereby EPA grants States and Territories authorization to implement the Subtitle C hazardous waste program within their boundaries. The scopes of authorization granted before and after Congress passed the Hazardous and Solid Waste Amendments of 1984 (HSWA) are addressed. Permitting responsibilities in authorized States and Territories are also discussed.

### MODULE 6-1: The Structure of State Authorization

#### **S T A T E AUTHORIZATION BEFORE HSWA**

Before HSWA, authorized States administered RCRA Subtitle C entirely in lieu of the Federal program

Under RCRA §3006, a State that applies and is found qualified by EPA to do so can take over administration and enforcement within the State's boundaries of the RCRA Subtitle C program. When EPA authorizes a State in this manner to administer and enforce the portion of the RCRA Subtitle C program that is sanctioned by RCRA provisions pre-dating HSWA, such authorization is referred to as "RCRA base authorization." Before Congress adopted HSWA in 1984, States with RCRA base authorization implemented the RCRA Subtitle C program within their boundaries entirely in lieu of the Federal program. Federal requirements that existed at the time a State became authorized no longer applied within the State, and EPA did not issue permits to facilities that the State was authorized to permit under its RCRA base authorization. When EPA issued new or amended Federal regulations pursuant to pre-HSWA RCRA authority, the Agency would administer them only in those States not having RCRA base authorization. In States with RCRA base authorization, such regulations did not take effect until the authorized State adopted them as state law. Further, unless such new or amended Federal regulations were more stringent than existing Federal regulations, a State with RCRA base authorization was not obligated to adopt them as state law. Instead, the State was allowed to ignore the new or amended, less stringent, pre-HSWA-based Federal regulations. If EPA issued more stringent, pre-HSWA-based, new or amended Federal regulations, such



**S T A T E  
AUTHORIZATION  
AFTER HSWA**

HSWA created three  
exceptions to exclusive state  
administration of RCRA  
Subtitle C

regulations would specify a date by which States with RCRA base authorization would be required to adopt them as state law. If an authorized State failed to incorporate the more stringent, pre-HSWA-based Federal regulations into its program by the specified date, the State would risk losing its base authorization.<sup>5</sup>

HSWA modified RCRA §3006 and created three exceptions to the rule that States with RCRA base authorization would implement RCRA Subtitle C within their boundaries entirely in lieu of the Federal program. The three exceptions are [40 CFR 271.3(b)]:

- (1) New, more stringent Federal requirements imposed pursuant to HSWA now take effect and are implemented immediately under Federal authority by EPA in all States, including States with RCRA base authorization;
- (2) New, more stringent Federal requirements promulgated by EPA pursuant to HSWA now supercede existing, less stringent provisions of authorized state programs. Such Federal requirements are implemented by EPA in authorized States until the States amend their programs to cover the changes; and
- (3) If new or amended Federal program requirements are being implemented by EPA in a State with RCRA base authorization, EPA issues permits or permit modifications in that State as required to carry out the implementation, even though the State still issues and enforces RCRA base permits. However, under such circumstances, RCRA §3006(c)(4) requires EPA to coordinate with the State. Also, the State can assist in administering the new or amended Federal requirements under the provisions of a State/EPA agreement [RCRA §3006(c)(3)].

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<sup>5</sup> Historically, EPA has not rescinded RCRA base authorizations for failure to enact equivalent authority within a specified time frame. For example, several States with RCRA base authorization did not enact adequate mixed waste regulatory authority within the required time frames. Nevertheless, EPA did not rescind the base authorization of any of these States. [See Appendix III which shows that as late as December 31, 1996, eight States with RCRA base authorization had not been granted mixed waste regulatory authority, even though the latest deadline set by EPA for such authorization was July 3, 1988.]

The HSWA exceptions to exclusive state administration only apply to new or amended, more stringent Federal program requirements imposed pursuant to HSWA

Significantly, these three exceptions only materialize when EPA promulgates new or amended Federal requirements *pursuant to HSWA* that are *more stringent* than existing Federal requirements. If EPA promulgates new or amended requirements pursuant to RCRA provisions that pre-date HSWA, then such requirements do not take effect in States with RCRA base authorization until the States adopt them, whether or not they are more stringent. Further, if EPA promulgates new or amended requirements pursuant to HSWA that are less stringent, or equivalent in stringency to existing Federal requirements, such new or amended requirements do not take effect in those States with RCRA base authorization and authorization for the affected HSWA program unless and until the States adopt them. In States with RCRA base authorization, but without authorization for the affected HSWA program, new or amended less stringent or equivalently stringent Federal HSWA requirements take effect according to the schedule set by EPA and are implemented by EPA unless and until the States become authorized for the affected HSWA program.

Example of Federal program requirements being imposed pursuant to RCRA provisions pre-dating HSWA

An example of EPA promulgating more stringent requirements under RCRA provisions that pre-date HSWA occurred in 1986. On July 3, 1986, EPA published notice that the hazardous components of mixed wastes, which the Agency had previously treated as exempt from RCRA Subtitle C regulations, were to be regulated under 40 CFR part 261. In light of this interpretation, States with RCRA base authorization were told that, to maintain their authorization, they had one year (i.e., until July 3, 1987), or if a statutory amendment was required, two years (i.e., until July 3, 1988), to implement any hazardous waste program changes needed to incorporate regulation of mixed wastes. Since EPA's revised interpretation of the applicability of RCRA to mixed waste was not the result of any HSWA provision, mixed waste remained exempt from RCRA Subtitle C Federal regulation in States with RCRA base authorization until such States made the program changes needed and received approval from EPA.



In eight States and the District of Columbia, mixed wastes are not regulated under RCRA Subtitle C

As of December 31, 1996, 39 States and one Territory had been granted mixed waste program authorization. Since 47 States have RCRA base authorization, that

means 8 States with RCRA base authorization are still not authorized to regulate mixed wastes. Hence, in those 8 States, mixed wastes are not regulated under RCRA Subtitle C. Similarly, the District of Columbia has received RCRA base authorization, but not mixed waste authorization. Therefore, mixed wastes are not regulated in the District of Columbia under RCRA Subtitle C (See Appendix III for detailed listings of States and non-state entities having RCRA base and mixed waste authorizations). Notwithstanding, a number of the States with RCRA base authorization but not mixed waste authorization are regulating mixed waste under the provisions of state laws.

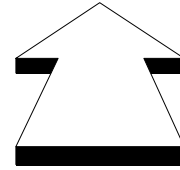
In States that have received no RCRA program authorizations, EPA administers the Federal RCRA Subtitle C program, which covers mixed waste.

The standards and requirements for RCRA Subtitle C state program authorization are presented in 40 CFR part 271, "Requirements for Authorization of State Hazardous Waste Programs." As of December 31, 1996, only three States and four Territories had not received RCRA base authorization (see Appendix III).

## MODULE 6-2: RCRA Permitting in Authorized States

Permitting in States having RCRA base authorization and authorization for all HSWA programs

In a State with RCRA base authorization and authorization for all HSWA programs listed on Table 1 of 40 CFR 271.1(j)(1), all RCRA permit applications and permit modification requests must be filed with the responsible state agency in accordance with the process outlined in Chapter 3.



**GO TO  
CHAPTER 3**

Permitting in States having RCRA base authorization and authorization for some, but not all, HSWA programs

If a State has RCRA base authorization but is not authorized to administer all of the effective HSWA regulations listed on Table 1 of 40 CFR 271.1(j)(1), the EPA Regional Office may issue those portions of new RCRA permits that the State is not authorized to issue. Likewise, the EPA Regional Office may add or amend HSWA portions of existing permits. Nevertheless, in States with RCRA base authorization but without some or all HSWA authorizations, all RCRA permit applications and permit modification requests should still be filed with the responsible state agency. The State will usually then coordinate the overall permitting process and solicit required input from EPA. Details of State/EPA interactions are presented in a State/EPA Memorandum of Agreement (MOA) defining the scope of the State's authorized RCRA program [40 CFR 271.8(b)].

Permitting in States having no RCRA program authorizations

In States without RCRA base authorization, RCRA permit applications and permit modification requests must be filed with the responsible EPA Regional office. Also, some States that do not have RCRA authorization may have their own independent hazardous waste permitting programs under state law that require submission of a separate state permit application. If so, DOE facilities should file state hazardous waste permit applications with the appropriate state agency.

Communication with both EPA and the responsible state agency is recommended

DOE personnel who obtain permits for hazardous and mixed waste treatment, storage, and disposal facilities should consult early in project planning with both EPA and the state agency responsible for hazardous waste regulation. This consultation is recommended regardless of whether the State administers any portion of the Federal RCRA program. It is also recommended

that DOE facilities provide copies of all correspondence related to RCRA permit applications, including the applications themselves, to both EPA and the responsible state agency.

EPA monitors state-issued RCRA permits

In addition to fulfilling its HSWA permitting responsibilities, if any, in authorized States, EPA also monitors all authorized state permitting programs. This may include reviewing state-issued permits for the treatment, storage, or disposal of hazardous waste [40 CFR 271.19(a)]. In this role, the EPA Region may comment if a State-issued permit provision seems inconsistent with the authorized state program. In most cases, if EPA decides to comment, the State will address or refute the comments, and the EPA Region will then withdraw the comment. However, in any event, a copy of EPA's comments will be sent to the applicant. Then, whether or not the State includes a condition in the final permit as suggested by EPA, EPA may take action under RCRA §3008(a)(3) to enforce the condition [RCRA §3008(a)(3); 40 CFR 271.19(e)].

Exhibit 6-1, located at the end of this module, provides an overview of the respective roles of EPA and States in implementing new or modified Federal RCRA regulations requiring issuance of permits or permit modifications.

Both EPA and the authorized State can enforce the provisions of an authorized RCRA base program

Once authorized to implement RCRA Subtitle C (including RCRA base authorization and authorization for any HSWA program), a State assumes primary RCRA hazardous waste enforcement responsibility within its boundaries for the authorized programs. Nevertheless, EPA can also enforce the authorized State's program requirements, as well as any more stringent new or modified Federal requirements imposed by HSWA [40 CFR 271.3(b)].<sup>6</sup> One exception to EPA's

EPA cannot enforce any portion of a State's hazardous waste program that is broader in scope than the Federal program

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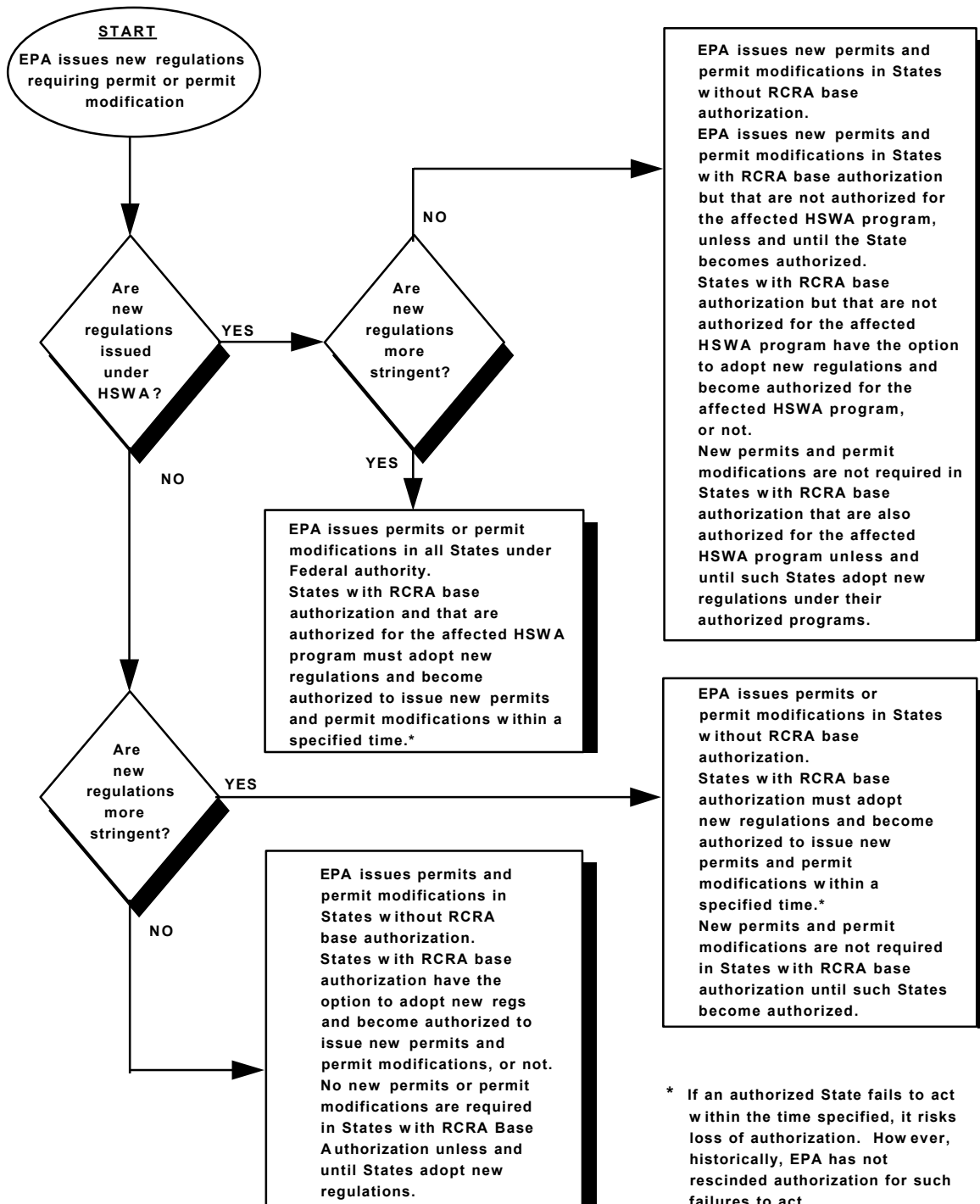
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Beginning in 1985, EPA called for State/EPA Enforcement Agreements. Such Agreements ensure that clear criteria are established in advance for direct Federal enforcement in authorized States. They also set procedures for advance consultation and notification before direct Federal enforcement [EPA Policy Framework for State/EPA

power to enforce a State's program occurs if state requirements are broader in scope than the Federal program (i.e., the state laws increase the size of the regulated community beyond the size of the Federal program). While RCRA allows state programs to be

broader than the Federal program, the additional coverage is not part of the Federal program assumed by the State and, hence, is not enforceable by EPA. This notwithstanding, EPA can take enforcement action at any appropriate time under RCRA §7003 ("Imminent Hazard").

# **EXHIBIT 6-1** **EPA/STATE RCRA PERMITTING** **RESPONSIBILITIES**





## **REFERENCES**

### **Statutes**

Hazardous and Solid Waste Amendments of 1984 (HSWA), P.L. 98-616.

Resource Conservation and Recovery Act, P.L. 94-580, as amended.

### **Regulations**

40 CFR part 271, "Requirements for Authorization of State Hazardous Waste Programs."

### **Other Publications**

U.S. Environmental Protection Agency, "Policy Framework for State/EPA Enforcement Agreements" (August 25, 1986).

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# Chapter 7

## Integration with Other Laws

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## **INTEGRATION WITH OTHER LAWS**

### **INTRODUCTION**

Chapter 3, Module 3-1, discussed permits that hazardous waste TSD facilities may be required to obtain by Federal laws other than RCRA (Submodule 3-1-2). The laws covered were the Clean Air Act, the Clean Water Act, the Safe Drinking Water Act, and the Atomic Energy Act (Nuclear Regulatory Commission regulations). Also discussed were Federal laws listed in 40 CFR 270.3 that, while not requiring permits themselves, could apply to the issuance of RCRA permits (Submodule 3-1-3). The laws covered were the Wild and Scenic Rivers Act, the National Historic Preservation Act, the Endangered Species Act, the Coastal Zone Management Act, and the Fish and Wildlife Coordination Act. Chapter 7 focuses on Federal laws, implementing regulations, and Executive Orders that were not addressed in Chapter 3. Included are the Atomic Energy Act (DOE Orders), the Archeological and Historic Preservation Act, the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), the Toxic Substances Control Act (TSCA), and Executive Orders 11988, "Floodplain Management," 11990, "Protection of Wetlands," 12088, "Federal Compliance with Pollution Control Standards," 12586, "Federal Compliance with Right-to-Know Laws and Pollution Prevention," and 12898, "Federal Actions to Address Environmental Justice." These edicts neither require permits themselves nor are listed in 40 CFR 270.3, but they contain provisions potentially applicable to the construction or operation of hazardous and mixed waste management facilities. Hence, DOE personnel responsible for obtaining RCRA permits should consider such laws, regulations and Executive Orders during facility planning and preparation of RCRA permit applications and supporting documents.

## MODULE 7-1: Other Federal Laws

### **Submodule 7-1-1: ATOMIC ENERGY ACT, DOE ORDERS**

Chapter 3, Module 3-1, discussed the licensing authority granted to the U.S. Nuclear Regulatory Commission (NRC) by the Atomic Energy Act of 1954 (AEA). As mentioned there, the AEA excludes most DOE mixed waste TSD units from any requirement to obtain an NRC license.<sup>1</sup> Instead, the radiological aspects of such units are governed by DOE Orders.



DOE Orders govern radiological aspects of most DOE mixed waste TSD units

The AEA, as amended, authorizes DOE to prescribe any policies, standards, criteria, procedures, rules, and regulations necessary or appropriate to carry out its vested functions [Energy Reorganization Act of 1974, Pub. L. 93-438 (88 Stat. 1233), sec. 105(a) (1974)], which include management of mixed wastes. Pursuant to that authority, DOE has adopted a series of internal orders and promulgated certain regulations. The DOE Orders and regulations apply with respect to DOE facilities in a manner similar to NRC regulations with respect to commercial nuclear facilities. Through contract provisions, DOE can enforce the requirements in DOE Orders on contractors who operate DOE installations.


Operators of DOE facilities must comply with all DOE Orders and DOE regulations. Exhibit 7-1 lists and briefly describes those DOE Orders and regulations with relevance to hazardous and mixed waste activities potentially requiring RCRA permits. DOE personnel responsible for RCRA permitting should ensure consistency between actions being taken to comply with DOE Orders and regulations and information being presented in any RCRA permit application.

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<sup>1</sup> DOE facilities that require NRC licenses are any demonstration liquid metal fast breeder reactor, any other demonstration nuclear reactor, any facility receiving and storing high-level radioactive wastes, and any retrievable surface storage facility for high-level radioactive wastes (42 U.S.C. §5842).




**EXHIBIT 7-1  
RELEVANT DOE DIRECTIVES**

<b>DOE Directive Number and Title [a]</b>	<b>Summary</b>	<b>Recommendations for Interface with RCRA Permitting</b>
10 CFR part 835, Occupational Radiation Protection 	Establishes primary standards for occupational radiation protection of workers at DOE and DOE contractor operations .	This order will affect RCRA permitting only for mixed waste management units. Ensure that waste sampling and analysis plans, as well as waste storage, inspection, and handling plans, submitted with RCRA Part B permit applications for existing or planned mixed waste management units are consistent with the appropriate radiation protection standards [see Chapter 2, Submodules 2-2-2-2 (Waste Characterization) and 2-2-2-5 (Procedures to Prevent Hazards)].
5400.1, General Environmental Protection Program ( <i>Paragraphs 2B, 4B, and 4C of Chapter II and 2D and 3B of Chapter III were canceled by DOE O 231.1, "Environment, Safety and Health Reporting"</i> )	Establishes the environmental protection program requirements, authorities, and responsibilities necessary to ensure the compliance of DOE operations with applicable Federal, state and local environmental protection laws and regulations, Executive Orders, and internal DOE policies and Orders. Defines content of mandatory notifications and reports, including Notification of Environmental Occurrences, 5-year pollution Abatement Projects Plan, Annual Site Environmental Report, and Reports on Radioactive Effluent/On-Site Discharge/ Unplanned Releases.	Ensure that information provided in RCRA Part B permit applications for hazardous and mixed waste management units is consistent with program plans developed under this order. Sections of the RCRA Part B permit applications that are likely to be affected include: <ul style="list-style-type: none"> <li>● Groundwater monitoring information for regulated units (see Chapter 2, Submodule 2-2-2-4).</li> <li>● Waste minimization/pollution prevention plan (see Chapter 2, Submodule 2-3-1)</li> <li>● Exposure assessment (see Chapter 2, Submodule 2-3-2).</li> </ul>


### EXHIBIT 7-1 (Cont'd.)

DOE Directive Number and Title [a]	Summary	Recommendations for Interface with RCRA Permitting
<p>5400.5, Radiation Protection for the Public and the Environment (<i>Paragraph 1A(3)(a) of Chapter II is canceled by DOE O 231.1, "Environment, Safety and Health Reporting"</i>)</p> <p>Note: DOE issued a notice of proposed rulemaking on March 25, 1993 (56 <u>FR</u> 16268). The final regulations, when promulgated, will codify radiation protection standards now contained in DOE Order 5400.5 in 10 CFR part 834.</p>	<p>Sets primary standards for protection of the public and environment against radiation exposure from normal operations under the control of DOE and DOE contractor personnel. Establishes dose limits for members of the public. Requires assessment of doses from all releases of radioactive material from DOE activities to ensure compliance with DOE's "as-low-as-reasonably-achievable" (ALARA) policy. Sets requirements for managing radioactive materials in liquid waste discharges, soils columns, and selected solid wastes. Requires DOE sites to have groundwater protection programs. Sets standards and procedures for release of buildings, land, equipment, and personal property containing residual radioactive material. Requires each DOE activity to have an Environmental Radiological Protection Program (ERPP), including an Environmental Monitoring Plan (EMP) covering effluent monitoring, environmental surveillance, preoperational background data gathering, plan for radioactive waste management, storage and disposal, and quality assurance.</p>	<p>This order will affect RCRA permitting only for mixed waste management units. Determine whether any ERPPs apply to the locations on which mixed waste management units are or will be located. Ensure that groundwater protection provisions of the ERPP are consistent with the RCRA Part B permit application (see Chapter 2, Submodule 2-2-2-4). Also, ensure that the section of the RCRA Part B permit application on exposure assessment (see Chapter 2, Submodule 2-3-2) is consistent with any EMP developed as part of the ERPP.</p>
<p>5480.4, Environmental Protection, Safety, and Health Protection Standards (<i>Attachment 2, paragraphs 2C, 2D(2)-(3), 2E(1)-(8); and Attachment 3, paragraphs 2C, 2D(2)-(3), 2E(1)-(7) are canceled by O 440.1, "Worker Protection Management for DOE Federal and Contractor Employees"</i>)</p>	<p>Lists Federal laws, regulations and Executive Orders and industry standards with which DOE facilities are, either legally or as a matter of DOE policy, obligated to comply. Among other things, requires DOE activities conducted under the Atomic Energy Act to comply with 40 CFR parts 260 through 265 and part 267. Assigns responsibilities within DOE for assuring compliance with mandatory standards.</p>	<p>This order should have minimal effect on RCRA permitting of hazardous and mixed waste management units. It can, however, serve as a reference for identifying Federal and industry standards with which DOE hazardous and mixed waste management units must comply.</p>

### EXHIBIT 7-1 (Cont'd.)

DOE Directive Number and Title [a]	Summary	Recommendations for Interface with RCRA Permitting
5480.23, Nuclear Safety Analysis Reports 	Establishes requirements for contractors responsible for the design, construction, operation, decontamination, or decommissioning of nuclear facilities to develop safety analyses that establish and evaluate the adequacy of the safety bases of the facilities. Requires the results of a nuclear facility's safety analysis to be documented in a Safety Analysis Report (SAR), addressing, among other things, radioactive and hazardous material waste management, hazardous material protection, and emergency preparedness.	This order will affect RCRA permitting only for mixed waste management units. Ensure that sections on security, contingency plans, and exposure assessment contained in RCRA Part B permit applications for existing or planned mixed waste management units are consistent with corresponding SARs [see Chapter 2, Submodules 2-2-2-5 (Procedures to Prevent Hazards), 2-2-2-6 (Contingency Plan) and 2-3-2 (Exposure Assessment)].
5484.1, Environmental Protection, Safety, and Health Protection Information Reporting Requirements ( <i>Paragraphs 1 through 5, 6a(1) through (10), both 6f(1) through (8) and the second misnumbered 6f, and Chapters I and II are cancelled by O 225.1, Accident Investigations</i> )	Establishes requirements and responsibilities for a reporting system for the purposes of ensuring that timely notification of occurrences involving DOE and DOE contractor operations is made to responsible authorities, that all occurrences are investigated, that reports are submitted to responsible DOE officials, that management takes responsive action, and that there is consistency in the treatment of occurrences.	This order should have minimal effect on RCRA permitting of hazardous and mixed waste management units. However, the reports required by this order may provide valuable background information that could be useful in preparing RCRA Part B permit applications.
5700.6C, Quality Assurance	Establishes requirements, responsibilities and criteria for DOE's quality assurance (QA) program. Departmental elements and maintenance and operating (M&O) contractors are required to implement QA programs ensuring that risks and environmental impacts are minimized and that safety, reliability, and performance are maximized through the application of effective management systems commensurate with the risks posed by the facility and its work.	Many aspects of design, construction and operation of hazardous and mixed waste management units may be subject to QA programs in place pursuant to this Order at DOE facilities where such units are or will be located. DOE personnel responsible for RCRA permitting should ensure that any sections of RCRA Part B permit applications that discuss QA are consistent with facility-specific QA programs.

### EXHIBIT 7-1 (Cont'd.)

DOE Directive Number and Title [a]	Summary	Recommendations for Interface with RCRA Permitting
5820.2A, Radioactive Waste Management 	<p>Establishes policies, guidelines, and minimum requirements by which DOE manages its radioactive and mixed waste facilities. Addresses design and operating requirements for storage and treatment of high-level waste, transuranic waste, low-level waste, and wastes containing naturally occurring and accelerator produced radioactive material. Packaging and shipping requirements are also covered. For low-level waste, minimum design and operating requirements for disposal facilities are included. Facility decommissioning requirements and the format for waste management plans are also discussed. Each DOE facility that generates, treats, stores, or disposes of DOE waste is required to prepare a Waste Management Plan annually. The scope of the plan includes the management of both radioactive and hazardous constituents in the Department's waste, whether these are separated or mixed.</p>	<p>Ensure that design and operating information presented in RCRA Part B permit applications for mixed waste management units is consistent with the requirements of this DOE Order (see Chapter 2, Submodules 2-2-2-1 through 2-2-2-9).</p> <p><b>NOTE: THIS ORDER HAS SIGNIFICANT POTENTIAL TO AFFECT RCRA PERMITTING OF MIXED WASTE UNITS.</b></p>
O 151.1, Comprehensive Emergency Management System	<p>Establishes policy and assigns and describes roles and responsibilities for the DOE Emergency Management System (EMS). The Emergency Management System provides the framework for development, coordination, control and direction of all emergency planning, preparedness, readiness assurance, response, and recovery actions.</p>	<p>Ensure that sections of RCRA Part B permit applications addressing contingency plans for hazardous and mixed waste management units are consistent with facility-specific procedures implementing the DOE EMS at facilities where such units are located [see Chapter 2, Submodule 2-2-2-6 (Contingency Plan)].</p>

**EXHIBIT 7-1 (Cont'd.)**

<b>DOE Directive Number and Title [a]</b>	<b>Summary</b>	<b>Recommendations for Interface with RCRA Permitting</b>
O 231.1, Environment, Safety and Health Reporting	Establishes DOE personnel responsibilities for meeting statutory and regulatory requirements to collect and report information on environment, safety and health.	This order should have minimal effect on RCRA permitting of hazardous and mixed waste management units. However, DOE personnel responsible for RCRA permitting should ensure consistency between information included in the reports addressed by this order and information presented in the RCRA permit application.
O 420.1, Facility Safety	Establishes, among other things, the requirements related to fire protection at DOE facilities.	Ensure consistency between the preparedness and prevention sections of RCRA Part B permit applications for hazardous or mixed waste management units with fire protection plans required by this Order (see Chapter 2, Submodules 2-2-2-5 (Procedures to Prevent Hazards) and 2-2-2-6 (Contingency Plan)).
O 451.1, National Environmental Policy Act Compliance Program	Establishes DOE internal requirements and responsibilities for implementing NEPA, the Council on Environmental Quality Regulations Implementing the Procedural Provisions of NEPA (40 CFR parts 1500-1508), and the DOE NEPA Implementing Procedures (10 CFR part 1021).	See Chapter 3, submodule 3-1-4.

### EXHIBIT 7-1 (Cont'd.)

DOE Directive Number and Title [a]	Summary	Recommendations for Interface with RCRA Permitting
O 470.1, Safeguards and Security Program	Establishes the policy and responsibilities for DOE's safeguards and security program, which is intended to protect against threats, including unauthorized access; theft or diversion of nuclear weapons; weapons components or special nuclear material, sabotage, espionage, loss or theft of classified matter or Government property; and other hostile acts that may cause unacceptable adverse impacts on national security or on the health and safety of DOE and DOE contractor employees, the public, or the environment.	Ensure that sections of RCRA Part B permit applications addressing security and emergency preparedness are consistent with the facility-specific safeguards and security plans and procedures developed pursuant to this order by DOE facilities at which hazardous or mixed waste management units are or will be located [see Chapter 2, Submodules 2-2-2-5 (Procedures to Prevent Hazards) and 2-2-2-6 (Contingency Plan)].
SEN-22-90, DOE Policy on Signatures of RCRA Permit Applications	Establishes DOE's policy that the duly authorized representatives of the Operations Offices should sign RCRA permit applications as the owner and should sign jointly as the operator with their contractors who are responsible or partially responsible for hazardous waste activities at the facility.	Ensure that RCRA permit applications for hazardous and mixed waste management units are appropriately signed in accordance with this DOE Order.
SEN-37-92, Waste Minimization Crosscut Plan Implementation	Establishes organizational and management arrangements necessary to implement the recommendations and strategies of DOE's Waste Minimization Crosscut Plan.	DOE personnel responsible for RCRA permitting should ensure that sections of RCRA permit applications addressing waste minimization at hazardous and mixed waste management units are consistent with DOE's Waste Minimization Plan [see Chapter 2, Submodule 2-3-1 (Waste Minimization)].

7-8

**NOTES:**

- a. DOE is in the process of revising, consolidating, cancelling, and renumbering its directives under the DOE Directives System (see Order DOE O 251.1, Directives System). DOE Directives include Policy Statements, Orders, Notices, Manuals, DOE Regulations, Technical Standards, and Guides. The Directive number provided is based in information last updated on April 7, 1997. Updated information may be available on the World Wide Web at <http://www.explorer.doe.gov>.

**Submodule 7-1-2:  
ARCHEOLOGICAL  
AND HISTORIC  
PRESERVATION ACT  
OF 1974**

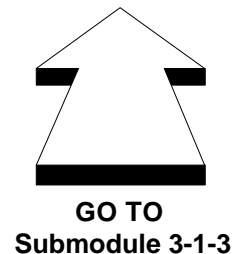
The Archeological and Historic Preservation Act of 1974 (P.L. 93-291) amended and significantly expanded the scope of the Archeological Recovery Act of 1960 (P.L. 86-523), which had given the Department of the Interior (DOI) primary responsibility for preserving archeological data that might be lost through federal dam construction. Under the 1974 Act, DOI became responsible for coordinating and administering a nationwide program for the recovery, protection, and preservation of scientific, prehistoric, historic, and archeological data that would otherwise be damaged or destroyed through Federal or federally related land modification activities. All other Federal agencies were assigned responsibility for notifying DOI in writing if they found that federal construction, or construction of a federally licensed project, activity, or program for which they were responsible, might cause irreparable loss or destruction of significant scientific, prehistorical, historical, or archeological data.

Regulations in 36 CFR part 79  
govern curation of archeological  
artifacts

Partly to meet the requirements of the Archeological and Historic Preservation Act, DOI's National Park Service promulgated final regulations in September 1990 setting generally applicable standards and guidelines to be followed by Federal agencies to preserve significant archeological artifacts and associated records recovered in conjunction with Federal projects [55 FR 37616 (September 12, 1990)].

Pursuant to 36 CFR part 79, if prehistoric and historic material remains and associated records are collected during studies conducted to support permitting of hazardous or mixed waste management facilities, DOE must ensure that such remains and records are deposited only in repositories with capabilities meeting designated standards (36 CFR 79.5).

DOE personnel responsible for permitting of hazardous and mixed waste management facilities should consider the requirements of 36 CFR part 79 when developing facility permitting plans and schedules. Additionally, as appropriate, information indicating compliance should be included in the RCRA Part B permit application. As a practical matter, following the steps recommended for ensuring compliance with the National Historic Preservation Act presented in Submodule 3-1-3, should ensure compliance with the Archeological and Historic Preservation Act.



**Submodule 7-1-3:  
COMPREHENSIVE  
ENVIRONMENTAL  
RESPONSE,  
COMPENSATION,  
AND LIABILITY ACT  
(CERCLA)**

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) (P.L. 96-510) was passed in response to a growing national concern about the release of hazardous substances from abandoned waste sites into the environment. The purpose of CERCLA was to provide for the cleanup of abandoned and leaking hazardous waste disposal sites. The Act, as amended, includes four basic elements:

1. An information gathering and analysis system to enable Federal and state governments to characterize chemical dump sites and develop priorities for response actions;
2. A Federal authority to respond to hazardous substance emergencies and to clean up leaking sites;
3. A Hazardous Substances Trust Fund (i.e., Superfund) to pay for removal and remedial actions; however, it is important to note that no money from the Superfund can be used for clean-ups at DOE or other federally-owned facilities; and
4. A system to designate those responsible for hazardous substance releases as liable for cleanup and restitution costs.

CERCLA is implemented by 40 CFR parts 300 through 399. The National Oil and Hazardous Substance Contingency Plan (NCP) (40 CFR part 300) provides the



organizational structure and procedures for preparing for and responding to discharges of oil and releases of hazardous substances, pollutants, and contaminants. It establishes four phases of response: (1) site discovery; (2) site assessment, and if warranted, listing on the National Priorities List (NPL);<sup>2</sup> (3) remedial investigation/feasibility study (RI/FS); and (4) remedy implementation through remedial design and remedial action (RD/RA).

RCRA permitting procedures may be affected if the TSD unit is located at a CERCLA site

Because CERCLA applies to all Federal agencies, including DOE, in the same manner and to the same extent as to non-government entities [CERCLA §120(a)(1)], DOE facilities, or portions of facilities, are often subject to CERCLA cleanup procedures. This situation can create confusion if DOE also operates, or plans to construct and operate, hazardous waste management units potentially subject to RCRA permitting requirements at the same facilities. Exhibit 7-2 lists CERCLA NCP provisions that affect RCRA permitting requirements applicable to units managing CERCLA wastes.

If cleanup activities are being conducted at a DOE facility and all or part of the facility is considered to be "on-site" for CERCLA purposes, DOE personnel responsible for permitting hazardous waste management units should evaluate the effect on RCRA permitting requirements of the CERCLA applicability. Sources of information on this subject include the following:

- *Federal Environmental Permitting Handbook*, U.S. Department of Energy, Office of Environmental Policy and Assistance (EH-41) [formerly Office of Environmental Guidance (EH-23)], RCRA/CERCLA Division, DOE/EH-0189P (May 1991).

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<sup>2</sup> The National Priorities List is the list compiled by EPA pursuant to CERCLA §105 of uncontrolled hazardous substance releases in the United States that are priorities for long-term remedial evaluation and response (40 CFR 300.5).

**EXHIBIT 7-2**  
**RELEVANT CERCLA AND NCP PROVISIONS**

<b>Regulation/Statute Section</b>	<b>Summary of Provision</b>
40 CFR 300.400(e)(1)	Permits are not required for on-site CERCLA response actions. "On-site" means "the areal extent of contamination and all suitable areas in very close proximity to the contamination necessary for implementation of the response action."
40 CFR 300.415(j) and 40 CFR 300.435(b)	In conducting CERCLA removal actions, DOE must, to the extent practicable, meet "applicable or relevant and appropriate requirements" (ARARs) under Federal environmental or state environmental or facility siting laws. Also, final remedy implementation must meet ARARs. If an on-site removal action requires treatment, storage, or disposal of wastes that meet the RCRA definition of hazardous, then the design and operating standards in 40 CFR part 264 are usually ARARs.
40 CFR 300.400(e)(1)	If CERCLA response activities (e.g., treatment, storage or disposal of wastes that are defined by RCRA as hazardous) are conducted off-site (i.e., not "on-site"), then permits must be obtained whenever required by other regulations.
CERCLA §121(d)(3)	If a CERCLA response activity involves transfer of CERCLA wastes to an off-site facility, that facility must be complying with RCRA requirements, as well as other applicable Federal laws and state requirements. Also, if the transfer is to a land disposal facility, the receiving unit cannot be releasing hazardous substances, and any releases from non-receiving units at the same facility must be subject to corrective action requirements of a RCRA permit.
40 CFR 300.440	Implements CERCLA §121(d)(3).

- *Guide to Selecting Compliant Off-Site Hazardous Waste Treatment, Storage and Disposal Facilities*, U.S. Department of Energy, Office of Environmental Policy and Assistance (EH-41) [formerly Office of Environmental Guidance (EH-23)], RCRA/CERCLA Division, Environmental Guidance DOE/EH-0427 (September 1994).
- *The Off-Site Rule*, U.S. Department of Energy, Office of Environmental Policy and Assistance (EH-41) [formerly Office of Environmental Guidance (EH-23)], RCRA/CERCLA Division, CERCLA Information Brief DOE/EH-231-020/0394 (March 1994).
- *Transporting CERCLA Wastes Off-Site - Final Off-Site Rule*, U.S. Department of Energy, Office of Environmental Policy and Assistance (EH-41) [formerly Office of Environmental Guidance (EH-23)], RCRA/CERCLA Division, CERCLA Regulatory Bulletin (December 31, 1994).

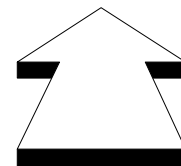
**Submodule 7-1-4:  
TOXIC SUBSTANCES  
CONTROL ACT  
(TSCA)**

No RCRA permit required to incinerate solely PCB wastes

RCRA permit required before burning hazardous wastes in PCB incinerator

Among other provisions, the Toxic Substances Control Act (TSCA) requires EPA to prescribe methods for disposal of polychlorinated biphenyls (PCBs) [TSCA §6(e)(1)(A)]. In response, EPA has promulgated regulations requiring that the EPA Regional Administrator issue written approval before PCBs can be burned in any incinerator [40 CFR 761.70(d)]. No additional approvals under Federal law (e.g., incinerator permit under RCRA) are needed if an incinerator manages only PCB wastes. However, if a PCB incinerator is designed to accept hazardous waste as well as PCB wastes and the owner/operator wants to burn hazardous wastes, then a RCRA permit must first be obtained [40 CFR 270.10(f)(3)]. Even so, construction can proceed under the TSCA approval alone.

***RCRA requirements for incinerator permitting were covered in detail in Chapter 2.***



**GO TO  
CHAPTER 2**

## **MODULE 7-2: Executive Orders**

Executive Orders are issued by, or under the authority of, the President of the United States in order to establish, implement, or clarify public policy. Many Executive Orders require Federal agencies to take specified actions. Exhibit 7-3 lists Executive Orders that may have resulted, or may in the future result, in actions by DOE that could affect the content of RCRA Part B permit applications. The exhibit provides a brief summary of the content of each relevant Executive Order and suggests how the Executive Order could interface with RCRA permit applications.

## EXHIBIT 7-3 RELEVANT EXECUTIVE ORDERS

Executive Order	Summary	Recommendations for Interface with RCRA Permitting
Executive Order 11988, Floodplain Management (signed May 24, 1977; 42 <u>FR</u> 26951; amended by E.O. 12148, July 20, 1979; 44 <u>FR</u> 43239)	Among other provisions, before providing federally undertaken, financed, or assisted construction and improvements, each agency is required to determine whether the proposed action will occur in a floodplain. If so, alternatives must be considered. If the head of the agency finds that the only practicable alternative requires siting in a floodplain, the agency must circulate an explanatory notice and provide an opportunity for early public review.	<ul style="list-style-type: none"> <li>• Ensure that the RCRA Part B permit application is consistent with the requirements of E.O. 11988 and 10 CFR part 1022, Compliance with Floodplain/ Wetlands Environmental Review Requirements. 10 CFR part 1022 establishes policy and procedures whereby DOE discharges its responsibilities under E.O. 11988 and E.O. 11990.</li> </ul>
Executive Order 11990, Protection of Wetlands (signed May 24, 1977; 42 <u>FR</u> 26961)	Each agency, to the extent permitted by law, is required to avoid undertaking or providing assistance for new construction located in wetlands unless the head of the agency finds (1) that there is no practicable alternative to such construction, and (2) that the proposed action includes all practicable measures to minimize harm to wetlands that may result from such use. An opportunity for early public review must be provided for any plans or proposals for new construction in wetlands.	<ul style="list-style-type: none"> <li>• Ensure that the RCRA Part B permit application is consistent with the requirements of E.O. 11990 and 10 CFR part 1022, Compliance with Floodplain/ Wetlands Environmental Review Requirements. 10 CFR part 1022 establishes policy and procedures whereby DOE discharges its responsibilities under E.O. 11988 and E.O. 11990. [NOTE: The regulations specifying the content of the RCRA Part B application delineate facility location information requirements with respect to floodplains, but not wetlands. However, the discussion of floodplains may cover wetlands. Also, placement of dredged or fill materials into wetlands requires a permit under Section 404 of the Clean Water Act (see Submodule 3-1-2).]</li> </ul>
Executive Order 12088, Federal Compliance with Pollution Control Standards (signed Oct. 13, 1978; 43 <u>FR</u> 47707; amended by E.O. 12580, Jan. 23, 1987; 52 <u>FR</u> 2923)	Each agency is responsible for complying with applicable pollution control standards. EPA is required to monitor compliance with such standards by Federal facilities and activities. If violations are detected, the agency in violation must promptly consult with the notifying agency and provide for its approval a plan to achieve and maintain compliance, including an implementation schedule. Annually, each agency is required to submit to the Office of Management and Budget, through EPA, a plan, including annual cost estimates, for control of environmental pollution.	<ul style="list-style-type: none"> <li>• If the activity requiring a RCRA permit is subject to a compliance plan entered pursuant to E.O. 12088, ensure consistency between all sections of the RCRA permit application and the compliance plan.</li> </ul>
Executive Order 12586, Federal Compliance with Right-to-Know Laws and Pollution Prevention [signed August 3, 1993; 58 <u>FR</u> 41981]	Each Federal agency is required to develop a written pollution prevention strategy that must include a pollution prevention policy statement and a commitment to utilize pollution prevention through source reduction where practicable. Each Federal facility covered by the strategy is required to prepare a pollution prevention plan by the end of 1995. Federal agencies are encouraged to develop and test innovative pollution prevention technologies.	<ul style="list-style-type: none"> <li>• Ensure that nothing contained in the pollution prevention plan for the Federal facility at which the activities being permitted are located conflicts with the content of the RCRA permit application.</li> </ul>

**EXHIBIT 7-3 (Cont'd.)**

<b>Executive Order</b>	<b>Summary</b>	<b>Recommendations for Interface with RCRA Permitting</b>
Executive Order 12898, Federal Actions to Address Environmental Justice (signed February 11, 1994; 59 <u>FR</u> 7629; amended by E.O. 12948, January 30, 1995; 60 <u>FR</u> 6381)	By March 24, 1995, each Federal agency is required to finalize an environmental justice strategy that identifies and addresses disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.	<ul style="list-style-type: none"><li>• Ensure consistency between the DOE environmental justice strategy and RCRA permit applications.</li></ul>

## **REFERENCES**

### **Statutes**

Archeological and Historic Preservation Act of 1974, P.L. 93-291, as amended.

Archeological Recovery Act of 1960, P.L. 86-523, as amended.

Atomic Energy Act of 1954, P.L. 83-703, as amended.

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), P.L. 96-510, as amended.

Energy Reorganization Act of 1974, P.L. 93-438, as amended.

Toxic Substances Control Act, P.L. 94-469, as amended.

### **Regulations**

10 CFR Part 1022, "U.S. Department of Energy Regulations on Compliance With Floodplains/Wetlands Environmental Review Requirements."

10 CFR Part 835, "U.S. Department of Energy Regulations on Occupational Radiation Protection."

36 CFR Part 79, "Advisory Council on Historic Preservation Regulations on Curation of Federally Owned and Administered Archeological Collections."

40 CFR Part 264, "EPA Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities."

40 CFR Part 270, "EPA Administered Permit Programs: Hazardous Waste Permit Program."

40 CFR Part 300, "EPA National Oil and Hazardous Substance Contingency Plan (NCP)."

40 CFR Part 761, "EPA Regulations on Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibition."

## **Executive Orders**

Executive Order 11988, "Floodplain Management" (signed May 24, 1977; 42 FR 26951: amended by E.O. 12148, July 20, 1979; 44 FR 43239).

Executive Order 11990, "Protection of Wetlands" (signed May 24, 1977; 42 FR 26961).

Executive Order 12088, "Federal Compliance with Pollution Control Standards" (signed Oct. 13, 1978; 43 FR 47707: amended by E.O. 12580, Jan. 23, 1987; 52 FR 2923).

Executive Order 12586, "Federal Compliance with Right-to-Know Laws and Pollution Prevention" [signed August 3, 1993; 58 FR 41981].

Executive Order 12898, "Federal Actions to Address Environmental Justice" (signed February 11, 1994; 59 FR 7629: amended by E.O. 12948, January 30, 1995; 60 FR 6381).

## **DOE Directives**

5400.1, "General Environmental Protection Program".

5400.5, "Radiation Protection for the Public and the Environment."

5480.23, "Nuclear Safety Analysis Reports."

5480.4, "Environmental Protection, Safety and Health Protection Standards."

5484.1, "Environmental Protection, Safety, and Health Protection Information Reporting Requirements."

5700.6C, "Quality Assurance."

5820.2A, "Radioactive Waste Management."

O 151.1, "Comprehensive Emergency Management System."

O 231.1, "Environment, Safety, and Health Reporting."

O 420.1, "Facility Safety."



O 451.1, "National Environmental Policy Act Compliance Program."

O 470.1, "Safeguards and Security Program."

SEN-22-90, "DOE Policy on Signatures of RCRA Permit Applications."

SEN-37-92, "Waste Minimization Crosscut Plan Implementation."

## **Federal Register**

55 FR 37616 (September 12, 1990), "Final Rule: Curation of Federally Owned and Administered Archeological Collections" (*codifying* 36 CFR part 79).

## **Other Publications**

U.S. Department of Energy, Office of Environmental Policy and Assistance (EH-41) [formerly Office of Environmental Guidance (EH-23)], RCRA/CERCLA Division, *Federal Environmental Permitting Handbook* (DOE/EH-0189P, May 1991).

U.S. Department of Energy, Office of Environmental Policy and Assistance (EH-41) [formerly Office of Environmental Guidance (EH-23)], RCRA/CERCLA Division, *Guide to Selecting Compliant Off-Site Hazardous Waste Treatment, Storage and Disposal Facilities* (DOE/EH-0427, September 1994).

U.S. Department of Energy, Office of Environmental Policy and Assistance (EH-41) [formerly Office of Environmental Guidance (EH-23)], RCRA/CERCLA Division, *The Off-Site Rule* (DOE/EH-231-020/0394, March 1994).

U.S. Department of Energy, Office of Environmental Policy and Assistance (EH-41) [formerly Office of Environmental Guidance (EH-23)], RCRA/CERCLA Division, *Transporting CERCLA Wastes Off-Site - Final Off-Site Rule* (CERCLA Regulatory Bulletin, December 31, 1994).

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# **Appendix I**

## **RCRA Part A Permit Application (EPA Form 8700-23)**

**NOTE:** EPA Form 8700-23 was re-approved by the Office of Management and Budget (OMB) on October 1, 1996 with a new expiration date of October 31, 1999. In States with RCRA base authorization, it may be superceded by an equivalent State form. In any event, DOE personnel responsible for RCRA permitting should contact the responsible regulatory agency (i.e., EPA or the designated State agency) for an official version of the Part A Permit Application form.

<b>For EPA Regional Use Only</b>	<b>EPA</b>  United States Environmental Protection Agency Washington, DC 20460  <b>Hazardous Waste Permit Application</b>  <b>Part A</b>  (Read the Instructions before starting)	
<b>Date Received</b> Month    Day    Year		

**I. Installation's EPA ID Number (Mark 'X' in the appropriate box)**

<input type="checkbox"/> <b>A. First Part A Submission</b>	<input type="checkbox"/> <b>B. Part A Amendment # _____</b>
<b>C. Installation's EPA ID Number</b>	<b>D. Secondary ID Number (If applicable)</b>

**II. Name of Facility**

--

**III. Facility Location (Physical address not P.O. Box or Route Number)**

<b>A. Street</b>		
<b>Street (Continued)</b>		
<b>City or Town</b>	<b>State</b>	<b>Zip Code</b>
<b>County Code (If known)</b>	<b>County Name</b>	

<b>B. Land Type</b> (Enter code)	<b>C. Geographic Location</b> LATITUDE (Degrees, Minutes, & Seconds) LONGITUDE (Degrees, Minutes & Seconds)	<b>D. Facility Existence Date</b> Month    Day    Year
<input type="text"/>	<input type="text"/>	<input type="text"/>

**IV. Facility Mailing Address**

<b>Street or P.O. Box</b>		
<b>City or Town</b>	<b>State</b>	<b>Zip Code</b>

**V. Facility Contact (Person to be contacted regarding waste activities at facility)**

<b>Name (Last)</b>	<b>(First)</b>
<b>Job Title</b>	<b>Phone Number (Area Code and Number)</b>

**VI. Facility Contact Address (See instructions)**

<b>A. Contact Address</b> Location    Mailing    Other	<b>B. Street or P.O. Box</b>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
<b>City or Town</b>	<b>State</b> <b>Zip Code</b>

STF ENV580F.2

EPA I.D. Number (Enter from page 1)	Secondary ID Number (Enter from page 1)																																																																																																																												
<b>XI. Nature of Business (Provide a brief description)</b>																																																																																																																													
<b>XII. Process Codes and Design Capacities</b>																																																																																																																													
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EPA I.D. Number (Enter from page 1)

Secondary ID Number (Enter from page 1)

## XII. Process Codes and Design Capabilities (Continued)

EXAMPLE FOR COMPLETING ITEM XII (Shown in line number X-1 below): A facility has a storage tank, which can hold 533.788 gallons.

Line Number	A. Process Code (From list above)	B. PROCESS DESIGN CAPACITY		C. Process Total Number Of Units	For Official Use Only
		1. Amount (Specify)	2. Unit Of Measure (Enter code)		
X 1	S 0 2	5 3 3 . 7 8 8	G	0 0 1	
1					
2					
3					
4					
5					
6					
7					
8					
9					
1 0					
1 1					
1 2					
1 3					

NOTE: If you need to list more than 13 process codes, attach an additional sheet(s) with the information in the same format as above. Number the lines sequentially, taking into account any lines that will be used for "other" processes (i.e., D99, S99, T04 and X99) in item XIII.

## XIII. Other Processes (Follow instructions from item XII for D99, S99, T04 and X99 process codes)

Line Number (Enter #s in seg w/XII)	A. Process Code (From list above)	B. PROCESS DESIGN CAPACITY		C. Process Total Number Of Units	D. Description Of Process
		1. Amount (Specify)	2. Unit Of Measure (Enter code)		
X 1	T 0 4				In-situ Vitrification
1					
2					
3					
4					

EPA I.D. Number (Enter from page 1)

Secondary ID Number (Enter from page 1)

## XIV. Description of Hazardous Wastes

- A. EPA HAZARDOUS WASTE NUMBER** - Enter the four-digit number from 40 CFR, Part 261 Subpart D of each listed hazardous waste you will handle. For hazardous wastes which are not listed in 40 CFR, Part 261 Subpart D, enter the four-digit number(s) from 40 CFR, Part 261 Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.
- B. ESTIMATED ANNUAL QUANTITY** - For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.
- C. UNIT OF MEASURE** - For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

**D. PROCESSES****1. PROCESS CODES:**

**For listed hazardous waste:** For each listed hazardous waste entered in column A select the code(s) from the list of process codes contained in item XII A. on page 3 to indicate how the waste will be stored, treated, and/or disposed of at the facility.

**For non-listed hazardous waste:** For each characteristic or toxic contaminant entered in column A, select the code(s) from the list of process codes contained in item XII A. on page 3 to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that possess that characteristic or toxic contaminant.

**NOTE: THREE SPACES ARE PROVIDED FOR ENTERING PROCESS CODES. IF MORE ARE NEEDED:**

- Enter the first two as described above.
- Enter "000" in the extreme right box of item XIV-D(1).
- Enter in the space provided on page 7, Item XIV-E, the line number and the additional code(s).

- 2. PROCESS DESCRIPTION:** If a code is not listed for a process that will be used, describe the process in the space provided on the form (D.(2)).

**NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER** - Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

- Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B, C and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
- In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.
- Repeat step 2 for each EPA Hazardous Waste Number that can be used to describe the hazardous waste.

**EXAMPLE FOR COMPLETING ITEM XIV** (shown in line numbers X-1, X-2, X-3, and X-4 below) - A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

Line Number	A. EPA HAZARD WASTE NO. (Enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (Enter code)	D. PROCESS									
				(1) PROCESS CODES (Enter code)						(2) PROCESS DESCRIPTION (If a code is not entered in D(1))			
X 1	K 0 5 4	900	P	T	0	3	D	8	0				
X 2	D 0 0 2	400	P	T	0	3	D	8	0				
X 3	D 0 0 1	100	P	T	0	3	D	8	0				
X 4	D 0 0 2												Included With Above



EPA I.D. Number (Enter from page 1)

Secondary ID Number (Enter from page 1)

## XIV. Description of Hazardous Wastes (Continued)

Line Number	A. EPA HAZARD WASTE NO. (Enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (Enter code)	D. PROCESSES	
				(1) PROCESS CODES (Enter code)	(2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					

<b>EPA I.D. Number (Enter from page 1)</b>	<b>Secondary ID Number (Enter from page 1)</b>
<b>XV. Map</b>	
<p><i>Attach to this application a topographic map, or other equivalent map, of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in this map area. See instructions for precise requirements.</i></p>	
<b>XVI. Facility Drawing</b>	
<p><i>All existing facilities must include a scale drawing of the facility (see instructions for more detail).</i></p>	
<b>XVII. Photographs</b>	
<p><i>All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas (see instructions for more detail).</i></p>	
<b>XVIII. Certification(s)</b>	
<p><i>I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.</i></p>	
Owner Signature	Date Signed
Name and Official Title (Type or print)	
Owner Signature	Date Signed
Name and Official Title (Type or print)	
Operator Signature	Date Signed
Name and Official Title (Type or print)	
Operator Signature	Date Signed
Name and Official Title (Type or print)	
<b>XIX. Comments</b>	
<p><b>Note: Mail completed form to the appropriate EPA Regional or State Office. (Refer to instructions for more information)</b></p>	

## **Appendix II**

# **EPA Headquarters' RCRA Part B Permit Application Completeness Review Checklist**

**NOTE:** EPA plans to have an updated version of this Checklist available by Spring 1997.

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Facility Name \_\_\_\_\_  
 ID No. \_\_\_\_\_  
 Date Part B Received \_\_\_\_\_  
 Date Review Due \_\_\_\_\_

Revision 7, 8/89

COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
A.	PART A APPLICATION	_____	_____	_____	_____	_____
B.	FACILITY DESCRIPTION	_____	_____	_____	_____	_____
B-1	General description	_____	_____	_____	_____	_____
B-2	Topographic map	_____	_____	_____	_____	_____
B-2a	General requirements	_____	_____	_____	_____	_____
B-2b	Additional requirements for land disposal facilities	_____	_____	_____	_____	_____
B-3	Location information	_____	_____	_____	_____	_____
B-3a	Seismic standard	_____	_____	_____	_____	_____
B-3b	Floodplain standard	_____	_____	_____	_____	_____
B-3b(1)	Demonstration of compliance	_____	_____	_____	_____	_____
B-3b(1)(a)	Flood proofing and flood protection measures; <u>or</u>	_____	_____	_____	_____	_____
B-3b(1)(b)	Flood plan	_____	_____	_____	_____	_____
B-3b(2)	Plan for future compliance with flood plain standard	_____	_____	_____	_____	_____
B-3b(3)	Waiver for Land Storage and Disposal Facilities	_____	_____	_____	_____	_____
B-4	Traffic information	_____	_____	_____	_____	_____

COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
C.	WASTE CHARACTERISTICS	_____	_____	_____	_____	_____
C-1	Chemical and physical analyses	_____	_____	_____	_____	_____
C-1a	Containerized wastes	_____	_____	_____	_____	_____
C-1b	Waste in tank-systems	_____	_____	_____	_____	_____
C-1c	Waste in piles	_____	_____	_____	_____	_____
C-1d	Landfilled wastes	_____	_____	_____	_____	_____
C-1e	Wastes incinerated <u>and</u> wastes used in performance tests	_____	_____	_____	_____	_____
C-1f	Wastes to be land treated	_____	_____	_____	_____	_____
C-1g	Wastes in miscellaneous treatment units	_____	_____	_____	_____	_____
C-2	Waste analysis plan	_____	_____	_____	_____	_____
C-2a	Parameters and rationale	_____	_____	_____	_____	_____
C-2b	Test methods	_____	_____	_____	_____	_____
C-2c	Sampling methods	_____	_____	_____	_____	_____
C-2d	Frequency of analyses	_____	_____	_____	_____	_____
C-2e	Additional requirements for wastes generated off-site	_____	_____	_____	_____	_____
C-2f	Additional requirements for ignitable, reactive or incompatible wastes	_____	_____	_____	_____	_____

COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
C-3	Waste analysis requirements pertaining to land disposal restrictions	_____	_____	_____	_____	_____
C-3a	Waste characterization	_____	_____	_____	_____	_____
C-3a(1)	Waste characteristics: solvent wastes and dioxin containing wastes	_____	_____	_____	_____	_____
C-3a(2)	Waste characteristics: California list wastes	_____	_____	_____	_____	_____
C-3a(3)	Waste characteristics: First third wastes with treatment standards	_____	_____	_____	_____	_____
C-3a(4)	Waste characteristics: second third wastes with treatment standards	_____	_____	_____	_____	_____
C-3a(5)	Waste characteristics: Soft hammer wastes	_____	_____	_____	_____	_____
C-3a(5)(a)	Soft hammer wastes: California list wastes with treatment standards	_____	_____	_____	_____	_____
C-3a(5)(b)	Soft hammer wastes: California list wastes without treatment standards	_____	_____	_____	_____	_____
C-3b	Notification and certification requirements	_____	_____	_____	_____	_____
C-3b(1)	Retention of generator notices and certification	_____	_____	_____	_____	_____

COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
C-3b(2)	Notification and certification for wastes to be further managed	_____	_____	_____	_____	_____
C-3b(3)	Notification and certification for soft hammer wastes not subject to California list prohibitions	_____	_____	_____	_____	_____
C-3b(4)	Additional notification and certification requirements for treatment facilities	_____	_____	_____	_____	_____
C-3b(4)(a)	Wastes with treatment standards expressed as concentrations	_____	_____	_____	_____	_____
C-3b(4)(b)	Wastes with treatment standards expressed as technologies	_____	_____	_____	_____	_____
C-3b(4)(c)	California list wastes not subject to treatment standards	_____	_____	_____	_____	_____
C-3b(4)(d)	Recyclable materials used in a manner constituting disposal	_____	_____	_____	_____	_____
C-3b(5)	Additional notification and certification requirements for disposal facilities	_____	_____	_____	_____	_____
C-3b(6)	Notification and certification requirements pertaining to landfill and surface impoundment disposal restrictions	_____	_____	_____	_____	_____



COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
C-3b(6)(a)	Requirements for treatment storage, and recovery facilities	_____	_____	_____	_____	_____
C-3b(6)(b)	Requirements for treatment and recovery facilities	_____	_____	_____	_____	_____
C-3b(6)(c)	Requirements for disposal facilities	_____	_____	_____	_____	_____
C-3c	Additional requirements pertaining to storage of restricted wastes	_____	_____	_____	_____	_____
C-3c(1)	Restricted wastes stored in containers	_____	_____	_____	_____	_____
C-3c(2)	Restricted wastes stored in tanks	_____	_____	_____	_____	_____
C-3c(3)	Storage of liquid PCB wastes	_____	_____	_____	_____	_____
C-3d	Additional requirements for treatment facilities	_____	_____	_____	_____	_____
C-3d(1)	Wastes with treatment standards expressed as concentrations in the waste	_____	_____	_____	_____	_____

COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
C-3d(2)	Wastes with treatment standards expressed as concentrations in the waste extract	_____	_____	_____	_____	_____
C-3d(3)	California list wastes not subject to treatment standards	_____	_____	_____	_____	_____
C-3e	Additional requirements for land disposal facilities	_____	_____	_____	_____	_____
C-3f	Exemptions from and extensions to land disposal restrictions	_____	_____	_____	_____	_____
C-3f(1)	Case-by-case extensions to an effective date	_____	_____	_____	_____	_____
C-3f(2)	Exemption from a treatment	_____	_____	_____	_____	_____
C-3f(3)	Variance from a treatment standard	_____	_____	_____	_____	_____
C-3f(4)	Additional requirements for surface impoundments exempted from land disposal restrictions	_____	_____	_____	_____	_____
C-3f(4)(a)	Treatment of wastes	_____	_____	_____	_____	_____
C-3f(4)(b)	Sampling and testing	_____	_____	_____	_____	_____
C-3f(4)(c)	Annual removal of residues	_____	_____	_____	_____	_____
C-3f(4)(d)	Design requirements	_____	_____	_____	_____	_____
C-3g	Requirements for land disposal facilities with an approved exemption or extension	_____	_____	_____	_____	_____

COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
D.	PROCESS INFORMATION	_____	_____	_____	_____	_____
D-1	Containers	_____	_____	_____	_____	_____
D-1a	Containers with free liquids	_____	_____	_____	_____	_____
D-1a(1)	Description of container	_____	_____	_____	_____	_____
D-1a(2)	Container management practices	_____	_____	_____	_____	_____
D-1a(3)	Secondary containment system design and operation	_____	_____	_____	_____	_____
D-1a(3)(a)	Requirement for the base or liner to contain liquids	_____	_____	_____	_____	_____
D-1a(3)(b)	Containment system drainage	_____	_____	_____	_____	_____
D-1a(3)(c)	Containment system capacity	_____	_____	_____	_____	_____
D-1a(3)(d)	Control of run-on	_____	_____	_____	_____	_____
D-1a(3)(e)	Removal of liquids from containment systems	_____	_____	_____	_____	_____
D-1b	Containers without free liquid	_____	_____	_____	_____	_____
D-1b(1)	Test for free liquids	_____	_____	_____	_____	_____
D-1b(2)	Description of containers	_____	_____	_____	_____	_____
D-1b(3)	Container management practices	_____	_____	_____	_____	_____
D-1b(4)	Container storage area drainage	_____	_____	_____	_____	_____
D-2	Tank systems	_____	_____	_____	_____	_____
D-2a	Tank systems descriptions	_____	_____	_____	_____	_____
D-2a(1)	Dimensions and capacity	_____	_____	_____	_____	_____

COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
D-2a(2)	Description of feed systems, safety cutoff, bypass systems, and pressure controls	_____	_____	_____	_____	_____
D-2a(3)	Diagram of piping, instrumentation and process-flow	_____	_____	_____	_____	_____
D-2a(4)	Ignitable, reactive and incompatible waste	_____	_____	_____	_____	_____
D-2b	Existing tank system	_____	_____	_____	_____	_____
D-2b(1)	Assessment of existing tank systems integrity	_____	_____	_____	_____	_____
D-2c	New tank systems	_____	_____	_____	_____	_____
D-2c(1)	Assessment of new tank system integrity	_____	_____	_____	_____	_____
D-2c(2)	Description of tank system installation and testing plans and procedures	_____	_____	_____	_____	_____
D-2d	Containment and detection of releases	_____	_____	_____	_____	_____
D-2d(1)	Plans and description of the design, construction, and operation of the secondary container system	_____	_____	_____	_____	_____
D-2d(1)(a)	Tank age determination	_____	_____	_____	_____	_____
D-2d(1)(b)	Requirements for secondary containment and leak detection	_____	_____	_____	_____	_____
D-2d(1)(c)	Requirements for an external liner vault, double-walled tank or equivalent device	_____	_____	_____	_____	_____

COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
D-2d(1)(d)	Secondary containment and leak detection requirements for ancillary equipment	_____	_____	_____	_____	_____
D-2d(2)	Requirements for tank systems until secondary containment is implemented	_____	_____	_____	_____	_____
D-2d(3)	Variance from secondary containment requirements	_____	_____	_____	_____	_____
D-2d(3)(a)	Variance based on a demonstration of equivalent protection of groundwater and surface water	_____	_____	_____	_____	_____
D-2d(3)(b)	Variance based on a demonstration of no substantial present or potential hazard	_____	_____	_____	_____	_____
D-2d(3)(c)	Exemption based on no free liquids and location inside a building	_____	_____	_____	_____	_____
D-2e	Controls and practices to prevent spills and overflow	_____	_____	_____	_____	_____
D-3	Waste piles	_____	_____	_____	_____	_____
D-3a	List of wastes	_____	_____	_____	_____	_____
D-3b	Liner exemption	_____	_____	_____	_____	_____
D-3b(1)	Enclosed dry piles	_____	_____	_____	_____	_____
D-3b(1)(a)	Protection from precipitation	_____	_____	_____	_____	_____
D-3b(1)(b)	Free liquids	_____	_____	_____	_____	_____
D-3b(1)(c)	Run-on protection	_____	_____	_____	_____	_____

COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
D-3c(1)(d)	Wind dispersal control	_____	_____	_____	_____	_____
D-3c(1)(e)	Leachate generation	_____	_____	_____	_____	_____
D-3b(2)	Alternate design/no migration	_____	_____	_____	_____	_____
D-3c	Liner engineering report	_____	_____	_____	_____	_____
D-3c(1)	Liner description	_____	_____	_____	_____	_____
D-3c(2)	Liner location relative to high water table	_____	_____	_____	_____	_____
D-3c(3)	Calculation of required soil liner thickness	_____	_____	_____	_____	_____
D-3c(4)	Liner strength requirements	_____	_____	_____	_____	_____
D-3c(5)	Liner strength demonstration	_____	_____	_____	_____	_____
D-3c(6)	Liner/waste compatibility testing results	_____	_____	_____	_____	_____
D-3c(7)	Liner installation	_____	_____	_____	_____	_____
D-3c(7)(a)	Synthetic liner seaming	_____	_____	_____	_____	_____
D-3c(7)(b)	Soil liner compaction	_____	_____	_____	_____	_____
D-3c(7)(c)	Installation inspection/testing programs	_____	_____	_____	_____	_____
D-3c(8)	Liner coverage	_____	_____	_____	_____	_____
D-3c(9)	Liner exposure prevention	_____	_____	_____	_____	_____
D-3c(10)	Synthetic-liner bedding	_____	_____	_____	_____	_____
D-3d	Liner foundation report	_____	_____	_____	_____	_____
D-3d(1)	Liner foundation design description	_____	_____	_____	_____	_____

COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
D-3d(2)	Subsurface exploration data	_____	_____	_____	_____	_____
D-3d(3)	Laboratory testing data	_____	_____	_____	_____	_____
D-3d(4)	Engineering analyses	_____	_____	_____	_____	_____
D-3d(4)(a)	Settlement potential	_____	_____	_____	_____	_____
D-3d(4)(b)	Bearing capacity and stability	_____	_____	_____	_____	_____
D-3d(4)(c)	Potential for bottom heave or blow-out	_____	_____	_____	_____	_____
D-3d(4)(d)	Construction and operational loadings	_____	_____	_____	_____	_____
D-3d(5)	Foundation installation procedures	_____	_____	_____	_____	_____
D-3d(6)	Foundation installation inspection program	_____	_____	_____	_____	_____
D-3e	Leachate collection and removal system	_____	_____	_____	_____	_____
D-3e(1)	System design and operation	_____	_____	_____	_____	_____
D-3e(2)	Chemical resistance	_____	_____	_____	_____	_____
D-3e(3)	Strength of materials	_____	_____	_____	_____	_____
D-3e(4)	Prevention of clogging	_____	_____	_____	_____	_____
D-3e(5)	Installation	_____	_____	_____	_____	_____
D-3e(6)	Maintenance	_____	_____	_____	_____	_____
D-3f	Run-on control system	_____	_____	_____	_____	_____
D-3f(1)	Calculation of peak flow	_____	_____	_____	_____	_____
D-3f(2)	Design and performance	_____	_____	_____	_____	_____
D-3f(3)	Construction	_____	_____	_____	_____	_____

COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
D-3f(4)	Maintenance	_____	_____	_____	_____	_____
D-3g	Run-off control system	_____	_____	_____	_____	_____
D-3g(1)	Calculation of peak flow	_____	_____	_____	_____	_____
D-3g(2)	Design and performance	_____	_____	_____	_____	_____
D-3g(3)	Construction	_____	_____	_____	_____	_____
D-3g(4)	Maintenance	_____	_____	_____	_____	_____
D-3h	Management of collection and holding units	_____	_____	_____	_____	_____
D-3i	Control of wind dispersal	_____	_____	_____	_____	_____
D-3j(1)	Engineered structure	_____	_____	_____	_____	_____
D-3j(2)	No liquid waste	_____	_____	_____	_____	_____
D-3j(3)	Exclusion of liquids	_____	_____	_____	_____	_____
D-3j(4)	Containment system	_____	_____	_____	_____	_____
D-3j(5)	Leak detection system	_____	_____	_____	_____	_____
D-3j(6)	Operation of leak detection system	_____	_____	_____	_____	_____
D-3j(7)	No migration	_____	_____	_____	_____	_____
D-3k	Treatment within the pile	_____	_____	_____	_____	_____
D-3k(1)	Treatment process description	_____	_____	_____	_____	_____
D-3k(2)	Equipment used	_____	_____	_____	_____	_____
D-3k(3)	Residuals description	_____	_____	_____	_____	_____



COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
D-3l	Special management plan for piles containing wastes F020, F021, F022, F023, F026, and F027	_____	_____	_____	_____	_____
D-3l(1)	Waste description	_____	_____	_____	_____	_____
D-3l(2)	Soil description	_____	_____	_____	_____	_____
D-3l(3)	Mobilizing properties	_____	_____	_____	_____	_____
D-3l(4)	Additional management techniques	_____	_____	_____	_____	_____
D-4	Surface impoundments	_____	_____	_____	_____	_____
D-4a	List of wastes	_____	_____	_____	_____	_____
D-4b	Liner system exemption requests	_____	_____	_____	_____	_____
D-4b(1)	Exemption based on existing portion	_____	_____	_____	_____	_____
D-4b(2)	Exemption based on alternative design and location	_____	_____	_____	_____	_____
D-4c	Liner system, general items	_____	_____	_____	_____	_____
D-4c(1)	Liner system description	_____	_____	_____	_____	_____
D-4c(2)	Liner system location relative to high water table	_____	_____	_____	_____	_____
D-4c(3)	Loads on liner system	_____	_____	_____	_____	_____
D-4c(4)	Liner system coverage	_____	_____	_____	_____	_____
D-4c(5)	Liner system exposure prevention	_____	_____	_____	_____	_____
D-4d	Liner system foundation	_____	_____	_____	_____	_____
D-4d(1)	Foundation description	_____	_____	_____	_____	_____

COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
D-4d(2)	Subsurface exploration data	_____	_____	_____	_____	_____
D-4d(3)	Laboratory testing data	_____	_____	_____	_____	_____
D-4d(4)	Engineering analyses	_____	_____	_____	_____	_____
D-4d(4)(a)	Settlement potential	_____	_____	_____	_____	_____
D-4d(4)(b)	Bearing capacity	_____	_____	_____	_____	_____
D-4d(4)(c)	Potential for excess hydrostatic or gas pressure	_____	_____	_____	_____	_____
D-4e	Liner systems, liners	_____	_____	_____	_____	_____
D-4e(1)	Synthetic liners	_____	_____	_____	_____	_____
D-4e(1)(a)	Synthetic liner compatibility data	_____	_____	_____	_____	_____
D-4e(1)(b)	Synthetic liner strength	_____	_____	_____	_____	_____
D-4e(1)(c)	Synthetic liner bedding	_____	_____	_____	_____	_____
D-4e(2)	Soil liners	_____	_____	_____	_____	_____
D-4e(2)(a)	Material testing data	_____	_____	_____	_____	_____
D-4e(2)(b)	Soil liner compatibility data	_____	_____	_____	_____	_____
D-4e(2)(c)	Soil liner thickness	_____	_____	_____	_____	_____
D-4e(2)(d)	Soil liner strength	_____	_____	_____	_____	_____
D-4f	Liner system, leachate detection system	_____	_____	_____	_____	_____
D-4f(1)	System operation and design	_____	_____	_____	_____	_____
D-4f(2)	Equivalent capacity	_____	_____	_____	_____	_____
D-4f(3)	Grading and drainage	_____	_____	_____	_____	_____

COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
D-4f(4)	System compatibility	_____	_____	_____	_____	_____
D-4f(5)	System strength	_____	_____	_____	_____	_____
D-4f(5)(a)	Stability of drainage layers	_____	_____	_____	_____	_____
D-4f(5)(b)	Strength of piping	_____	_____	_____	_____	_____
D-4f(6)	Prevention of clogging	_____	_____	_____	_____	_____
D-4g	Liner system, construction and maintenance	_____	_____	_____	_____	_____
D-4g(1)	Material specifications	_____	_____	_____	_____	_____
D-4g(1)(a)	Synthetic liners	_____	_____	_____	_____	_____
D-4g(1)(b)	Soil liners	_____	_____	_____	_____	_____
D-4g(1)(c)	Leachate detection system	_____	_____	_____	_____	_____
D-4g(2)	Construction specifications	_____	_____	_____	_____	_____
D-4g(2)(a)	Liner system foundation	_____	_____	_____	_____	_____
D-4g(2)(b)	Soil liner	_____	_____	_____	_____	_____
D-4g(2)(c)	Synthetic liners	_____	_____	_____	_____	_____
D-4g(2)(d)	Leachate detection system	_____	_____	_____	_____	_____
D-4g(3)	Construction quality control program	_____	_____	_____	_____	_____
D-4g(4)	Maintenance procedures for leachate detection system	_____	_____	_____	_____	_____
D-4g(5)	Liners repairs during operations	_____	_____	_____	_____	_____
D-4h	Prevention of overtopping	_____	_____	_____	_____	_____
D-4h(1)	Design features	_____	_____	_____	_____	_____

COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
D-4h(2)	Operating procedures	_____	_____	_____	_____	_____
D-4h(3)	Overtopping preventions	_____	_____	_____	_____	_____
D-4h(4)	Freeboard requirements	_____	_____	_____	_____	_____
D-4h(5)	Outflow destination	_____	_____	_____	_____	_____
D-4i	Dike stability	_____	_____	_____	_____	_____
D-4i(1)	Engineer's certification	_____	_____	_____	_____	_____
D-4i(2)	Dike design description	_____	_____	_____	_____	_____
D-4i(3)	Erosion and piping protection	_____	_____	_____	_____	_____
D-4i(4)	Subsurface soil conditions	_____	_____	_____	_____	_____
D-4i(5)	Stability analysis	_____	_____	_____	_____	_____
D-4i(6)	Strength and compressibility test results	_____	_____	_____	_____	_____
D-4i(7)	Dike construction procedures	_____	_____	_____	_____	_____
D-4i(8)	Dike construction inspection program	_____	_____	_____	_____	_____
D-4j	Special waste management plan for surface impoundments containing wastes F020, F021, F022, F023, F026, and F027	_____	_____	_____	_____	_____
D-4j(1)	Waste description	_____	_____	_____	_____	_____
D-4j(2)	Soil description	_____	_____	_____	_____	_____
D-4j(3)	Mobilizing properties	_____	_____	_____	_____	_____
D-4j(4)	Additional management techniques	_____	_____	_____	_____	_____

COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
D-5	Incinerators	_____	_____	_____	_____	_____
D-5a	Justification for exemption	_____	_____	_____	_____	_____
D-5b	Trial burn	_____	_____	_____	_____	_____
D-5b(1)	New incinerator start-up/shakedown conditions (reserved)	_____	_____	_____	_____	_____
D-5b(2)	Trial burn plan	_____	_____	_____	_____	_____
D-5b(2)(a)	Engineering description of incinerator	_____	_____	_____	_____	_____
D-5b(2)(b)	Sampling, analysis and monitoring procedures including QA/ QC plan	_____	_____	_____	_____	_____
D-5b(2)(c)	Trial burn schedule	_____	_____	_____	_____	_____
D-5b(2)(d)	Test protocols	_____	_____	_____	_____	_____
D-5b(2)(e)	Pollution control equipment operation	_____	_____	_____	_____	_____
D-5b(2)(f)	Shutdown procedures	_____	_____	_____	_____	_____
D-5b(2)(g)	New incinerator post-trial burn operation (reserved)	_____	_____	_____	_____	_____
D-5c	Data in lieu of trial burn	_____	_____	_____	_____	_____
D-5c(1)	Engineering description of incinerator	_____	_____	_____	_____	_____
D-5c(2)	Expected incinerator operation	_____	_____	_____	_____	_____
D-5c(3)	Design and operating condition comparisons	_____	_____	_____	_____	_____
D-5c(4)	Results of previous trial burns	_____	_____	_____	_____	_____

COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
D-5c(4)(a)	Sampling and analysis techniques	_____	_____	_____	_____	_____
D-5c(4)(b)	Methods and results	_____	_____	_____	_____	_____
D-5d	Determinations	_____	_____	_____	_____	_____
D-6	Landfills	_____	_____	_____	_____	_____
D-6a	List of wastes	_____	_____	_____	_____	_____
D-6b	Liner system exemption requests	_____	_____	_____	_____	_____
D-6b(1)	Exemption based on existing portion	_____	_____	_____	_____	_____
D-6b(2)	Exemption based on alternative design and location	_____	_____	_____	_____	_____
D-6b(3)	Exemption for monofills	_____	_____	_____	_____	_____
D-6b(4)	Groundwater monitoring exemption	_____	_____	_____	_____	_____
D-6b(4)(a)	Engineered structure	_____	_____	_____	_____	_____
D-6b(4)(b)	No liquid waste	_____	_____	_____	_____	_____
D-6b(4)(c)	Exclusion of liquids	_____	_____	_____	_____	_____
D-6b(4)(d)	Containment system	_____	_____	_____	_____	_____
D-6b(4)(e)	Leak detection system	_____	_____	_____	_____	_____
D-6b(4)(f)	Operation of leak detection system	_____	_____	_____	_____	_____
D-6b(4)(g)	No migration	_____	_____	_____	_____	_____
D-6c	Liner system, general items	_____	_____	_____	_____	_____
D-6c(1)	Liner system description	_____	_____	_____	_____	_____

COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
D-6c(2)	Liner system location relative to high water table	_____	_____	_____	_____	_____
D-6c(3)	Loads on liner system	_____	_____	_____	_____	_____
D-6c(4)	Liner system coverage	_____	_____	_____	_____	_____
D-6c(5)	Liner system exposure prevention	_____	_____	_____	_____	_____
D-6d	Liner system, foundation	_____	_____	_____	_____	_____
D-6d(1)	Foundation description	_____	_____	_____	_____	_____
D-6d(2)	Subsurface exploration data	_____	_____	_____	_____	_____
D-6d(3)	Laboratory testing data	_____	_____	_____	_____	_____
D-6d(4)	Engineering analysis	_____	_____	_____	_____	_____
D-6d(4)(a)	Settlement potential	_____	_____	_____	_____	_____
D-6d(4)(b)	Bearing capacity	_____	_____	_____	_____	_____
D-6d(4)(c)	Stability of landfill slopes	_____	_____	_____	_____	_____
D-6d(4)(d)	Potential for excess hydrostatic or gas pressure	_____	_____	_____	_____	_____
D-6e	Liner system, liners	_____	_____	_____	_____	_____
D-6e(1)	Synthetic liners	_____	_____	_____	_____	_____
D-6e(1)(a)	Synthetic liner compatibility data	_____	_____	_____	_____	_____
D-6e(1)(b)	Synthetic liner strength	_____	_____	_____	_____	_____
D-6e(1)(c)	Synthetic liner bedding	_____	_____	_____	_____	_____
D-6e(2)	Soil liners	_____	_____	_____	_____	_____
D-6e(2)(a)	Material testing data	_____	_____	_____	_____	_____

COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
D-6e(2)(b)	Soil liner compatibility data	_____	_____	_____	_____	_____
D-6e(2)(c)	Soil liner thickness	_____	_____	_____	_____	_____
D-6e(2)(d)	Soil liner strength	_____	_____	_____	_____	_____
D-6f	Liner system, leachate collection/ detection systems	_____	_____	_____	_____	_____
D-6f(1)	System operation and design	_____	_____	_____	_____	_____
D-6f(2)	Equivalent capacity	_____	_____	_____	_____	_____
D-6f(3)	Grading and drainage	_____	_____	_____	_____	_____
D-6f(4)	Maximum leachate head	_____	_____	_____	_____	_____
D-6f(5)	System compatibility	_____	_____	_____	_____	_____
D-6f(6)	System strength	_____	_____	_____	_____	_____
D-6f(6)(a)	Stability of drainage layers	_____	_____	_____	_____	_____
D-6f(6)(b)	Strength of piping	_____	_____	_____	_____	_____
D-6f(7)	Prevention of clogging	_____	_____	_____	_____	_____
D-6g	Liner system, construction and maintenance	_____	_____	_____	_____	_____
D-6g(1)	Material specifications	_____	_____	_____	_____	_____
D-6g(1)(a)	Synthetic liners	_____	_____	_____	_____	_____
D-6g(1)(b)	Soil liners	_____	_____	_____	_____	_____
D-6g(1)(c)	Leachate collection/detection systems	_____	_____	_____	_____	_____
D-6g(2)	Construction specifications	_____	_____	_____	_____	_____
D-6g(2)(a)	Liner system foundation	_____	_____	_____	_____	_____



COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
D-6g(2)(b)	Soil liner	_____	_____	_____	_____	_____
D-6g(2)(c)	Synthetic liners	_____	_____	_____	_____	_____
D-6g(2)(d)	Leachate collection/detection systems	_____	_____	_____	_____	_____
D-6g(3)	Construction quality control program	_____	_____	_____	_____	_____
D-6g(4)	Maintenance procedures for leachate collection/detection system	_____	_____	_____	_____	_____
D-6g(5)	Liner repairs during operation	_____	_____	_____	_____	_____
D-6h	Run-on and run-off control systems	_____	_____	_____	_____	_____
D-6h(1)	Run-on control system	_____	_____	_____	_____	_____
D-6h(1)(a)	Design and performance	_____	_____	_____	_____	_____
D-6h(1)(b)	Calculation of peak flow	_____	_____	_____	_____	_____
D-6h(2)	Runoff control system	_____	_____	_____	_____	_____
D-6h(2)(a)	Design and performance	_____	_____	_____	_____	_____
D-6h(2)(b)	Calculation of peak flow	_____	_____	_____	_____	_____
D-6h(3)	Management of collection and holding units	_____	_____	_____	_____	_____
D-6h(4)	Construction	_____	_____	_____	_____	_____
D-6h(5)	Maintenance	_____	_____	_____	_____	_____
D-6i	Control of wind dispersal	_____	_____	_____	_____	_____
D-6j	Liquids in landfills	_____	_____	_____	_____	_____
D-6j(1)	Bulk or noncontainerized free liquids	_____	_____	_____	_____	_____

COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
D-6j(2)	Containers holding free liquids	_____	_____	_____	_____	_____
D-6j(3)	Restriction to small containers	_____	_____	_____	_____	_____
D-6j(4)	Nonstorage containers	_____	_____	_____	_____	_____
D-6j(5)	Labpacks	_____	_____	_____	_____	_____
D-6j(5)(a)	Inside containers	_____	_____	_____	_____	_____
D-6j(5)(b)	Overpack	_____	_____	_____	_____	_____
D-6j(5)(c)	Absorbent material	_____	_____	_____	_____	_____
D-6j(5)(d)	Incompatible wastes	_____	_____	_____	_____	_____
D-6j(5)(e)	Reactive wastes	_____	_____	_____	_____	_____
D-6k	Containerized wastes	_____	_____	_____	_____	_____
D-6l	Special waste management plan for landfills containing F020, F021 F022, F023, F026, and F027	_____	_____	_____	_____	_____
D-6l(1)	Waste description	_____	_____	_____	_____	_____
D-6l(2)	Soil description	_____	_____	_____	_____	_____
D-6l(3)	Mobilizing properties	_____	_____	_____	_____	_____
D-6l(4)	Additional management techniques	_____	_____	_____	_____	_____
D-7	Land treatment	_____	_____	_____	_____	_____
D-7a	Treatment demonstration	_____	_____	_____	_____	_____
D-7a(1)	Demonstration wastes	_____	_____	_____	_____	_____

COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
D-7a(2)	Demonstration data sources	_____	_____	_____	_____	_____
D-7a(2)(a)	Existing literature	_____	_____	_____	_____	_____
D-7a(2)(b)	Operating data	_____	_____	_____	_____	_____
D-7a(3)	Laboratory/field testing programs	_____	_____	_____	_____	_____
D-7a(3)(a)	Toxicity testing	_____	_____	_____	_____	_____
D-7a(3)(b)	Field plot testing	_____	_____	_____	_____	_____
D-7a(3)(c)	Laboratory Testing	_____	_____	_____	_____	_____
D-7b	Land treatment program	_____	_____	_____	_____	_____
D-7b(1)	List of wastes	_____	_____	_____	_____	_____
D-7b(2)	Operating procedures	_____	_____	_____	_____	_____
D-7b(2)(a)	Waste application rates	_____	_____	_____	_____	_____
D-7b(2)(b)	Waste application methods	_____	_____	_____	_____	_____
D-7b(2)(c)	Control of soil pH	_____	_____	_____	_____	_____
D-7b(2)(d)	Enhancement of microbial or chemical reactions	_____	_____	_____	_____	_____
D-7b(2)(e)	Control of soil moisture	_____	_____	_____	_____	_____
D-7c	Unsaturated zone monitoring plan	_____	_____	_____	_____	_____
D-7c(1)	Soil-pore liquid monitoring	_____	_____	_____	_____	_____
D-7c(1)(a)	Sampling location	_____	_____	_____	_____	_____
D-7c(1)(b)	Sampling frequency	_____	_____	_____	_____	_____
D-7c(1)(c)	Sampling equipment	_____	_____	_____	_____	_____

COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
D-7c(1)(d)	Sampling equipment installation	_____	_____	_____	_____	_____
D-7c(1)(e)	Sampling procedures	_____	_____	_____	_____	_____
D-7c(1)(f)	Analytical procedures	_____	_____	_____	_____	_____
D-7c(1)(g)	Chain of custody	_____	_____	_____	_____	_____
D-7c(1)(h)	Background values	_____	_____	_____	_____	_____
D-7c(1)(I)	Statistical methods	_____	_____	_____	_____	_____
D-7c(1)(j)	Justification of Principle Hazardous Constituents	_____	_____	_____	_____	_____
D-7c(2)	Soil core monitoring	_____	_____	_____	_____	_____
D-7c(2)(a)	Sampling location	_____	_____	_____	_____	_____
D-7c(2)(b)	Sampling frequency	_____	_____	_____	_____	_____
D-7c(2)(c)	Sampling equipment	_____	_____	_____	_____	_____
D-7c(2)(d)	Sampling procedures	_____	_____	_____	_____	_____
D-7c(2)(e)	Analytical procedures	_____	_____	_____	_____	_____
D-7c(2)(f)	Chain-of-custody	_____	_____	_____	_____	_____
D-7c(2)(g)	Background values	_____	_____	_____	_____	_____
D-7c(2)(h)	Statistical methods	_____	_____	_____	_____	_____
D-7c(2)(I)	Justification of Principle Hazardous Constituents	_____	_____	_____	_____	_____
D-7d	Treatment zone description	_____	_____	_____	_____	_____
D-7d(1)	Horizontal and vertical dimensions	_____	_____	_____	_____	_____

COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
D-7d(2)	Soil survey	_____	_____	_____	_____	_____
D-7d(3)	Soil series descriptions	_____	_____	_____	_____	_____
D-7d(4)	Soil sampling data	_____	_____	_____	_____	_____
D-7d(5)	Seasonal high water table	_____	_____	_____	_____	_____
D-7e	Unit design, construction, operation, and maintenance	_____	_____	_____	_____	_____
D-7e(1)	Run-on control	_____	_____	_____	_____	_____
D-7e(2)	Run-off control	_____	_____	_____	_____	_____
D-7e(3)	Minimizing hazardous constituent run-off	_____	_____	_____	_____	_____
D-7e(4)	Management of accumulated run-on and run-off	_____	_____	_____	_____	_____
D-7e(5)	Control of wind dispersal	_____	_____	_____	_____	_____
D-7f	Food chain crops	_____	_____	_____	_____	_____
D-7f(1)	Food chain crop demonstration	_____	_____	_____	_____	_____
D-7f(1)(a)	Demonstration basis	_____	_____	_____	_____	_____
D-7f(1)(b)	Test procedures	_____	_____	_____	_____	_____
D-7f(2)	Cadmium-bearing wastes	_____	_____	_____	_____	_____
D-7f(2)(a)	Crops for human consumption	_____	_____	_____	_____	_____
D-7f(2)(b)	Animal feed	_____	_____	_____	_____	_____
D-7g	Waste management plan for land treatment units containing wastes F020, F021, F022, F023, F026, and F027	_____	_____	_____	_____	_____
D-7g(1)	Waste description	_____	_____	_____	_____	_____

COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
D-7g(2)	Soil description	_____	_____	_____	_____	_____
D-7g(3)	Mobilizing properties	_____	_____	_____	_____	_____
D-7g(4)	Additional management techniques	_____	_____	_____	_____	_____
D-7h	Incompatible wastes	_____	_____	_____	_____	_____
D-8	Miscellaneous units	_____	_____	_____	_____	_____
D-8a	Description of miscellaneous units	_____	_____	_____	_____	_____
D-8b	Waste characterization	_____	_____	_____	_____	_____
D-8c	Treatment effectiveness	_____	_____	_____	_____	_____
D-8d	Environmental performance standards for miscellaneous units	_____	_____	_____	_____	_____
D-8d(1)	Protection of groundwater and subsurface environment	_____	_____	_____	_____	_____
D-8d(1)(a)	Environmental assessment	_____	_____	_____	_____	_____
D-8d(1)(b)	Performance standards	_____	_____	_____	_____	_____
D-8d(2)	Protection of surface water, wetlands, and soil surface	_____	_____	_____	_____	_____
D-8d(2)(a)	Environmental assessment	_____	_____	_____	_____	_____
D-8d(2)(b)	Performance standards	_____	_____	_____	_____	_____
D-8d(3)	Protection of the atmosphere	_____	_____	_____	_____	_____
D-8d(3)(a)	Environmental assessment	_____	_____	_____	_____	_____
D-8d(3)(b)	Performance standards	_____	_____	_____	_____	_____

COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
D-8e	Monitoring, analysis inspection, response reporting, and corrective action	_____	_____	_____	_____	_____
D-8e(1)	Elements of a monitoring program	_____	_____	_____	_____	_____
D-8e(2)	Air monitoring alternatives	_____	_____	_____	_____	_____

COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
E.	GROUNDWATER MONITORING	_____	_____	_____	_____	_____
E-1	Exemption from groundwater protection requirements	_____	_____	_____	_____	_____
E-1a	Waste piles	_____	_____	_____	_____	_____
E-1b	Landfill	_____	_____	_____	_____	_____
E-1c	No migration	_____	_____	_____	_____	_____
E-2	Interim status groundwater monitoring data	_____	_____	_____	_____	_____
E-2a	Description of wells	_____	_____	_____	_____	_____
E-2b	Description of sampling/analysis procedures	_____	_____	_____	_____	_____
E-2c	Monitoring data	_____	_____	_____	_____	_____
E-2d	Statistical procedures	_____	_____	_____	_____	_____
E-2e	Groundwater assessment plan	_____	_____	_____	_____	_____
E-3	General hydrogeologic information	_____	_____	_____	_____	_____
E-4	Topographic map requirements	_____	_____	_____	_____	_____
E-5	Contaminant plume description	_____	_____	_____	_____	_____
E-6	General monitoring program requirements	_____	_____	_____	_____	_____
E-6a	Description of wells	_____	_____	_____	_____	_____
E-6b	Description of sampling analysis procedures	_____	_____	_____	_____	_____



COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
E-6c	Procedures for establishing background quality	_____	_____	_____	_____	_____
E-6d	Statistical procedures	_____	_____	_____	_____	_____
E-6d(1)	Parametric analysis of variance (ANOVA)	_____	_____	_____	_____	_____
E-6d(2)	Non-parametric ANOVA (based on ranks)	_____	_____	_____	_____	_____
E-6d(3)	Tolerance or prediction interval procedure	_____	_____	_____	_____	_____
E-6d(4)	Control chart approach	_____	_____	_____	_____	_____
E-6d(5)	Alternative approach	_____	_____	_____	_____	_____
E-7	Detection monitoring program	_____	_____	_____	_____	_____
E-7a	Indicator parameters, waste constituents, reaction products to be monitored	_____	_____	_____	_____	_____
E-7b	Groundwater monitoring program	_____	_____	_____	_____	_____
E-7c	Background groundwater concentration values for proposed parameters	_____	_____	_____	_____	_____
E-7d	Proposed sampling and analysis procedures	_____	_____	_____	_____	_____
E-7e	Statistically significant increase in any constituent or parameter identified at any compliance point monitoring well	_____	_____	_____	_____	_____

COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
E-8	Compliance monitoring program	_____	_____	_____	_____	_____
E-8a	Description of the monitoring program	_____	_____	_____	_____	_____
E-8a(1)	Waste description	_____	_____	_____	_____	_____
E-8a(2)	Characterization of contaminated groundwater	_____	_____	_____	_____	_____
E-8a(3)	Hazardous constituents to be monitored in compliance program	_____	_____	_____	_____	_____
E-8a(4)	Concentration limits	_____	_____	_____	_____	_____
E-8a(5)	Alternate concentration limits	_____	_____	_____	_____	_____
E-8a(5)(I)	Adverse effects on groundwater quality	_____	_____	_____	_____	_____
E-8a(5)(ii)	Potential adverse effects	_____	_____	_____	_____	_____
E-8a(6)	Engineering report describing groundwater monitoring system	_____	_____	_____	_____	_____
E-8a(7)	Proposed sampling and statistical analysis procedures for groundwater data	_____	_____	_____	_____	_____
E-8a(8)	Groundwater protection standard exceeded at compliance point monitoring well	_____	_____	_____	_____	_____
E-9	Corrective action program	_____	_____	_____	_____	_____
E-9a	Characterization of contaminated groundwater	_____	_____	_____	_____	_____

COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
E-9b	Concentration limits	_____	_____	_____	_____	_____
E-9c	Alternate concentration limits	_____	_____	_____	_____	_____
E-9c(1)	Adverse effects on groundwater quality	_____	_____	_____	_____	_____
E-9c(2)	Potential adverse effects	_____	_____	_____	_____	_____
E-9d	Corrective action plan	_____	_____	_____	_____	_____
E-9d(1)	Location	_____	_____	_____	_____	_____
E-9d(2)	Construction detail	_____	_____	_____	_____	_____
E-9d(3)	Plans for removing wastes	_____	_____	_____	_____	_____
E-9d(4)	Treatment technologies	_____	_____	_____	_____	_____
E-9d(5)	Effectiveness of correction program	_____	_____	_____	_____	_____
E-9d(6)	Reinjection system	_____	_____	_____	_____	_____
E-9d(7)	Additional hydro geologic data	_____	_____	_____	_____	_____
E-9d(8)	Operation and maintenance	_____	_____	_____	_____	_____
E-9d(9)	Closure and post-closure plans	_____	_____	_____	_____	_____
E-9e	Groundwater monitoring program	_____	_____	_____	_____	_____
E-9e(1)	Description of monitoring system	_____	_____	_____	_____	_____
E-9e(2)	Description of sampling and analysis procedures	_____	_____	_____	_____	_____
E-9e(3)	Monitoring data and statistical analysis procedures	_____	_____	_____	_____	_____
E-9e(4)	Reporting requirements	_____	_____	_____	_____	_____

COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
F.	PROCEDURES TO PREVENT HAZARDS	_____	_____	_____	_____	_____
F-1	Security	_____	_____	_____	_____	_____
F-1a	Security procedures and equipment	_____	_____	_____	_____	_____
F-1a(1)	24-hour surveillance system	_____	_____	_____	_____	_____
F-1a(2)	Barrier and means to control entry	_____	_____	_____	_____	_____
F-1a(2)(a)	Barrier	_____	_____	_____	_____	_____
F-1a(2)(b)	Means to control entry	_____	_____	_____	_____	_____
F-1a(3)	Warning signs	_____	_____	_____	_____	_____
F-1b	Waiver	_____	_____	_____	_____	_____
F-1b(1)	Injury to intruder	_____	_____	_____	_____	_____
F-1b(2)	Violation caused by intruder	_____	_____	_____	_____	_____
F-2	Inspection schedule	_____	_____	_____	_____	_____
F-2a	General inspection requirements	_____	_____	_____	_____	_____
F-2a(1)	Types of problems	_____	_____	_____	_____	_____
F-2a(2)	Frequency of inspections	_____	_____	_____	_____	_____
F-2b	Specific process inspection requirements	_____	_____	_____	_____	_____
F-2b(1)	Container inspection	_____	_____	_____	_____	_____
F-2b(2)	Tank system inspection	_____	_____	_____	_____	_____
F-2b(2)(a)	Tank system external corrosion and releases	_____	_____	_____	_____	_____

COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
F-2b(2)(b)	Tank system construction materials and surrounding area	_____	_____	_____	_____	_____
F-2b(2)(c)	Tank system overfilling control equipment	_____	_____	_____	_____	_____
F-2b(2)(d)	Tank system monitoring and leak detection equipment	_____	_____	_____	_____	_____
F-2b(2)(e)	Tank system cathodic protection	_____	_____	_____	_____	_____
F-2b(3)	Waste pile inspection	_____	_____	_____	_____	_____
F-2b(3)(a)	Run-on and run-off control system	_____	_____	_____	_____	_____
F-2b(3)(b)	Wind dispersal system	_____	_____	_____	_____	_____
F-2b(3)(c)	Leachate collection and removal system	_____	_____	_____	_____	_____
F-2b(4)	Surface impoundment inspection	_____	_____	_____	_____	_____
F-2b(4)(a)	Condition assessment	_____	_____	_____	_____	_____
F-2b(4)(a)(1)	Overtopping control system	_____	_____	_____	_____	_____
F-2b(4)(a)(2)	Impoundment contents	_____	_____	_____	_____	_____
F-2b(4)(b)	Structural integrity	_____	_____	_____	_____	_____
F-2b(5)	Incinerator inspection	_____	_____	_____	_____	_____
F-2b(5)(a)	Incinerator and associated equipment	_____	_____	_____	_____	_____

COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
F-2b(5)(b)	Incinerator waste feed cut-off system and associated alarms	_____	_____	_____	_____	_____
F-2b(6)	Landfill inspection	_____	_____	_____	_____	_____
F-2b(6)(a)	Run-on and run-off control system	_____	_____	_____	_____	_____
F-2b(6)(b)	Wind dispersal control system	_____	_____	_____	_____	_____
F-2b(6)(c)	Leachate collection and removal system	_____	_____	_____	_____	_____
F-2b(7)	Land treatment facility inspection	_____	_____	_____	_____	_____
F-2b(7)(a)	Run-on and run-off control system	_____	_____	_____	_____	_____
F-2b(7)(b)	Wind dispersal control system	_____	_____	_____	_____	_____
F-2b(8)	Miscellaneous unit inspections	_____	_____	_____	_____	_____
F-3	Waiver <u>or</u> documentation of preparedness and prevention requirements	_____	_____	_____	_____	_____
F-3a	Equipment requirements	_____	_____	_____	_____	_____
F-3a(1)	Internal communications	_____	_____	_____	_____	_____
F-3a(2)	External communications	_____	_____	_____	_____	_____
F-3a(3)	Emergency equipment	_____	_____	_____	_____	_____
F-3a(4)	Water for fire control	_____	_____	_____	_____	_____
F-3b	Aisle space requirement	_____	_____	_____	_____	_____

COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
F-4	Preventive procedures, structures, and equipment	_____	_____	_____	_____	_____
F-4a	Unloading operations	_____	_____	_____	_____	_____
F-4b	Run-off	_____	_____	_____	_____	_____
F-4c	Water supplies	_____	_____	_____	_____	_____
F-4d	Equipment and power failure	_____	_____	_____	_____	_____
F-4e	Personnel protection equipment	_____	_____	_____	_____	_____
F-5	Prevention of reaction of ignitable, reactive, and incompatible wastes	_____	_____	_____	_____	_____
F-5a	Precautions to prevent ignition or reaction of ignitable or reactive wastes	_____	_____	_____	_____	_____
F-5b	General precautions for handling ignitable or reactive waste and mixing of incompatible waste	_____	_____	_____	_____	_____
F-5c	Management of ignitable or reactive wastes in containers	_____	_____	_____	_____	_____
F-5d	Management of incompatible wastes in containers	_____	_____	_____	_____	_____
F-5e	Management of ignitable or reactive wastes in tank systems	_____	_____	_____	_____	_____
F-5f	Management of incompatible wastes in tanks systems	_____	_____	_____	_____	_____
F-5g	Management of ignitable or reactive wastes placed in waste piles	_____	_____	_____	_____	_____

COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
F-5h	Management of incompatible wastes placed in waste piles	_____	_____	_____	_____	_____
F-5i	Management of ignitable or reactive wastes placed in surface impoundments	_____	_____	_____	_____	_____
F-5j	Management of incompatible wastes placed in surface impoundments	_____	_____	_____	_____	_____
F-5k	Management of ignitable or reactive wastes placed in landfills	_____	_____	_____	_____	_____
F-5l	Management of incompatible wastes placed in landfills	_____	_____	_____	_____	_____
F-5m	Management of ignitable or reactive wastes placed in land treatment units	_____	_____	_____	_____	_____
F-5n	Management of incompatible wastes placed in land treatment units	_____	_____	_____	_____	_____



COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
G.	CONTINGENCY PLAN	_____	_____	_____	_____	_____
G-1	General information	_____	_____	_____	_____	_____
G-2	Emergency coordinator	_____	_____	_____	_____	_____
G-3	Implementation	_____	_____	_____	_____	_____
G-4	Emergency response procedures	_____	_____	_____	_____	_____
G-4a	Notification	_____	_____	_____	_____	_____
G-4b	Identification of hazardous materials	_____	_____	_____	_____	_____
G-4c	Assessment	_____	_____	_____	_____	_____
G-4d	Control procedures	_____	_____	_____	_____	_____
G-4e	Prevention of recurrence or spread of fires, explosions, or releases	_____	_____	_____	_____	_____
G-4f	Storage and treatment of released material	_____	_____	_____	_____	_____
G-4g	Incompatible waste	_____	_____	_____	_____	_____
G-4h	Post-emergency equipment maintenance	_____	_____	_____	_____	_____
G-4i	Container spills and leakage	_____	_____	_____	_____	_____
G-4j	Tank spills and leakage	_____	_____	_____	_____	_____
G-4j(1)	Stopping waste addition	_____	_____	_____	_____	_____
G-4j(2)	Removing waste	_____	_____	_____	_____	_____
G-4j(3)	Containment of visible releases	_____	_____	_____	_____	_____
G-4j(4)	Notifications, reports	_____	_____	_____	_____	_____

COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
G-4j(5)	Provision of secondary containment, repair of closure	_____	_____	_____	_____	_____
G-4k	Surface impoundment spills and leakage	_____	_____	_____	_____	_____
G-4k(1)	Emergency repairs	_____	_____	_____	_____	_____
G-4k(1)(a)	Stopping waste addition	_____	_____	_____	_____	_____
G-4k(1)(b)	Containing leaks	_____	_____	_____	_____	_____
G-4k(1)(c)	Stopping leaks	_____	_____	_____	_____	_____
G-4k(1)(d)	Preventing catastrophic failure	_____	_____	_____	_____	_____
G-4k(1)(e)	Emptying the impoundments	_____	_____	_____	_____	_____
G-4k(2)	Certification	_____	_____	_____	_____	_____
G-4k(3)	Repairs as a result of sudden drop	_____	_____	_____	_____	_____
G-4k(3)(a)	Existing portions of surface impoundments	_____	_____	_____	_____	_____
G-4k(3)(b)	Other portions of surface impoundments	_____	_____	_____	_____	_____
G-5	Emergency equipment	_____	_____	_____	_____	_____
G-6	Coordination agreements	_____	_____	_____	_____	_____
G-7	Evacuation plan	_____	_____	_____	_____	_____
G-8	Required reports	_____	_____	_____	_____	_____

COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
H.	PERSONNEL TRAINING					
H-1	Outline of the training program	_____	_____	_____	_____	_____
H-1a	Job title/job description	_____	_____	_____	_____	_____
H-1b	Training content, frequency, and techniques	_____	_____	_____	_____	_____
H-1c	Training director	_____	_____	_____	_____	_____
H-1d	Relevance of training to job position	_____	_____	_____	_____	_____
H-1e	Training for emergency response	_____	_____	_____	_____	_____
H-2	Implementation of training program	_____	_____	_____	_____	_____

COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
I.	CLOSURE PLANS, POST-CLOSURE PLANS AND FINANCIAL REQUIREMENTS	_____	_____	_____	_____	_____
I-1	Closure plans	_____	_____	_____	_____	_____
I-1a	Closure performance standard	_____	_____	_____	_____	_____
I-1b	Partial closure and final closure activities	_____	_____	_____	_____	_____
I-1c	Maximum waste inventory	_____	_____	_____	_____	_____
I-1d	Schedule for closure	_____	_____	_____	_____	_____
I-1d(1)	Time allowed for closure	_____	_____	_____	_____	_____
I-1d(1)(a)	Extension for closure time	_____	_____	_____	_____	_____
I-1e	Closure procedures	_____	_____	_____	_____	_____
I-1e(1)	Inventory removal	_____	_____	_____	_____	_____
I-1e(2)	Disposal or decontamination of equipment , structures and soils	_____	_____	_____	_____	_____
I-1e(3)	Closure of disposal units/contingent closures	_____	_____	_____	_____	_____
I-1e(3)(a)	Disposal impoundments	_____	_____	_____	_____	_____
I-1e(3)(a)(I)	Elimination of liquids	_____	_____	_____	_____	_____
I-1e(3)(a)(ii)	Waste stabilization	_____	_____	_____	_____	_____
I-1e(3)(b)	Cover design	_____	_____	_____	_____	_____
I-1e(3)(c)	Minimization of liquid migration	_____	_____	_____	_____	_____
I-1e(3)(d)	Maintenance needs	_____	_____	_____	_____	_____
I-1e(3)(e)	Drainage and erosion	_____	_____	_____	_____	_____

COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
I-1e(3)(f)	Settlement and subsidence	_____	_____	_____	_____	_____
I-1e(3)(g)	Cover permeability	_____	_____	_____	_____	_____
I-1e(3)(h)	Freeze/thaw effects	_____	_____	_____	_____	_____
I-1e(4)	Closure of containers	_____	_____	_____	_____	_____
I-1e(5)	Closure of tanks	_____	_____	_____	_____	_____
I-1e(6)	Closure of waste piles	_____	_____	_____	_____	_____
I-1e(7)	Closure of surface impoundments	_____	_____	_____	_____	_____
I-1e(8)	Closure of incinerators	_____	_____	_____	_____	_____
I-1e(9)	Closure of landfills	_____	_____	_____	_____	_____
I-1e(10)	Closure of land treatment facilities	_____	_____	_____	_____	_____
I-1e(10)(a)	Continuance of treatment	_____	_____	_____	_____	_____
I-1e(10)(b)	Vegetative cover	_____	_____	_____	_____	_____
I-1e(11)	Closure of miscellaneous units	_____	_____	_____	_____	_____
I-2	Post-closure plan/contingent post-closure	_____	_____	_____	_____	_____
I-2a	Inspection plan	_____	_____	_____	_____	_____
I-2b	Monitoring plan	_____	_____	_____	_____	_____
I-2c	Maintenance plan	_____	_____	_____	_____	_____
I-2d	Land treatment	_____	_____	_____	_____	_____
I-2e	Miscellaneous units	_____	_____	_____	_____	_____
I-2f	Post-closure security	_____	_____	_____	_____	_____

COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
I-2g	Post-closure contact	_____	_____	_____	_____	_____
I-3	Notices required for disposal facilities	_____	_____	_____	_____	_____
I-3a	Certification of closure	_____	_____	_____	_____	_____
I-3b	Survey plat	_____	_____	_____	_____	_____
I-3c	Post-closure certification	_____	_____	_____	_____	_____
I-3d	Post-closure notices	_____	_____	_____	_____	_____
I-4	Closure cost estimate	_____	_____	_____	_____	_____
I-5	Financial assurance mechanism for closure	_____	_____	_____	_____	_____
I-5a	Closure trust fund	_____	_____	_____	_____	_____
I-5b	Surety bond	_____	_____	_____	_____	_____
I-5b(1)	Surety bond guaranteeing payment into a closure trust fund	_____	_____	_____	_____	_____
I-5b(2)	Surety bond guaranteeing performance of closure	_____	_____	_____	_____	_____
I-5c	Closure letter of credit	_____	_____	_____	_____	_____
I-5d	Closure insurance	_____	_____	_____	_____	_____
I-5e	Financial test and corporate guarantee for closure	_____	_____	_____	_____	_____
I-5f	Use of multiple financial mechanisms	_____	_____	_____	_____	_____
I-5g	Use of financial mechanism for multiple facilities	_____	_____	_____	_____	_____
I-6	Post-closure cost estimate	_____	_____	_____	_____	_____

COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
I-7	Financial assurance mechanism for post-closure	_____	_____	_____	_____	_____
I-7a	Post-closure trust fund	_____	_____	_____	_____	_____
I-7b	Surety bond	_____	_____	_____	_____	_____
I-7b(1)	Surety bond guaranteeing payment into a post-closure trust fund	_____	_____	_____	_____	_____
I-7b(2)	Surety bond guaranteeing performance of post-closure care	_____	_____	_____	_____	_____
I-7c	Post-closure letter of credit	_____	_____	_____	_____	_____
I-7d	Post-closure insurance	_____	_____	_____	_____	_____
I-7e	Financial test and corporate guarantee for post-closure care	_____	_____	_____	_____	_____
I-7f	Use of multiple financial mechanisms	_____	_____	_____	_____	_____
I-7g	Use of a financial mechanism for multiple facilities	_____	_____	_____	_____	_____
I-8	Liability requirements	_____	_____	_____	_____	_____
I-8a	Coverage for sudden accidental occurrences	_____	_____	_____	_____	_____
I-8a(1)	Endorsement of certification	_____	_____	_____	_____	_____
I-8a(2)	Financial test or corporate guarantee for liability coverage	_____	_____	_____	_____	_____

COMPLETENESS/TECHNICAL EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
I-8a(3)	Use of multiple insurance mechanisms	_____	_____	_____	_____	_____
I-8b	Coverage for nonsudden accidental occurrences	_____	_____	_____	_____	_____
I-8b(1)	Endorsement or certification	_____	_____	_____	_____	_____
I-8b(2)	Financial test or corporate guarantee for liability coverage	_____	_____	_____	_____	_____
I-8b(3)	Use of multiple insurance mechanisms	_____	_____	_____	_____	_____
I-8c	Request for variance	_____	_____	_____	_____	_____
I-9	State mechanisms	_____	_____	_____	_____	_____
I-9a	Use of state-required mechanism	_____	_____	_____	_____	_____
I-9b	State assumption of responsibility	_____	_____	_____	_____	_____



		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
J.	CORRECTIVE ACTION FOR SOLID WASTE MANAGEMENT UNITS	_____	_____	_____	_____	_____
J-1	Solid waste management units	_____	_____	_____	_____	_____
J-1a	Characterize the solid waste management unit	_____	_____	_____	_____	_____
J-1b	No solid waste management units	_____	_____	_____	_____	_____
J-2	Releases	_____	_____	_____	_____	_____
J-2a	Characterize releases	_____	_____	_____	_____	_____
J-2b	No releases	_____	_____	_____	_____	_____
K.	OTHER FEDERAL LAWS	_____	_____	_____	_____	_____
L.	PART B CERTIFICATION	_____	_____	_____	_____	_____

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## **Appendix III**

### **Base RCRA and Mixed Waste Authorization Status of States**

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## APPENDIX III

### BASE RCRA AND MIXED WASTE AUTHORIZATION STATUS

#### Base RCRA Authorization Status

##### States with Base RCRA Authorization

As of December 31, 1996, the following States had authorization to administer and enforce the base RCRA Subtitle C program (i.e., pre-Hazardous and Solid Waste Amendments (HSWA)) within their borders entirely in lieu of the Federal Program (referred to as "Base RCRA Authorization"):

Alabama	Nebraska
Arizona	Nevada
Arkansas	New Hampshire
California	New Jersey
Colorado	New Mexico
Connecticut	New York
Delaware	North Carolina
Florida	North Dakota
Georgia	Ohio
Idaho	Oklahoma
Illinois	Oregon
Indiana	Pennsylvania
Kansas	Rhode Island
Kentucky	South Carolina
Louisiana	South Dakota
Maine	Tennessee
Maryland	Texas
Massachusetts	Utah
Michigan	Vermont
Minnesota	Virginia
Mississippi	Washington
Missouri	West Virginia
Montana	Wisconsin
	Wyoming

### Non-State Entities with Base RCRA Authorization

As of December 31, 1996, the following non-State entities had Base RCRA Authorization:

District of Columbia

Guam

### States and Non-State Entities without Base RCRA Authorization

As of December 31, 1996, the following States and non-State entities did not have Base RCRA Authorization:

Alaska

Hawaii

Iowa

American Samoa

Northern Mariana Islands

Puerto Rico

Virgin Islands

## **Mixed Waste Authorization Status**

### States with Mixed Waste Authorization

As of December 31, 1996, the following States had received RCRA authorization to regulate mixed wastes within their borders:

Alabama	Montana
Arizona	Nebraska
Arkansas	Nevada
California	New Hampshire
Colorado	New Mexico
Connecticut	New York
Delaware	North Carolina
Florida	North Dakota
Georgia	Ohio
Idaho	Oklahoma
Illinois	Oregon
Indiana	South Carolina
Kansas	South Dakota
Kentucky	Tennessee
Louisiana	Texas
Michigan	Utah
Minnesota	Vermont
Mississippi	Washington
Missouri	Wisconsin
	Wyoming

### Non-State Entities with Mixed Waste Authorization

As of December 31, 1996, the following non-State entities had received RCRA authorization to regulate mixed wastes within their borders in lieu of the Federal Program:

Guam

States and Non-State Entities with Base RCRA Authorization, but without Mixed Waste Authorization

As of December 31, 1996, the following States and non-State entities had received Base RCRA Authorization, but had not received mixed waste authorization. In these States and non-State entities, mixed waste is regulated only pursuant to State laws and regulations, if any. Those entities marked with an asterisk have adopted, and are implementing under State law, mixed waste regulatory programs which are substantially similar to the Federal Program. However, these States have not yet received RCRA authorization to implement such programs in lieu of the Federal Program. Entities not marked with an asterisk may also have mixed waste regulatory programs under state law, but if so, EPA's data base does not include such information.

Maine

Maryland

\*Massachusetts

\*New Jersey

Pennsylvania

Rhode Island

\*Virginia

\*West Virginia

District of Columbia



## References

U.S. Environmental Protection Agency, Federal, State and Tribal Programs Branch, *State Authorization Tracking System (StATS)* (December 31, 1996) (via telephone conference with RCRA/CERCLA Hotline (703/412-9810), March 17, 1997).

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## **Appendix IV**

# **RCRA §3010 Notification of Regulated Waste Activity Form (EPA Form 8700-12)**

**NOTE:** EPA Form 8700-12 was re-approved by the Office of Management and Budget (OMB) on October 9, 1996 with a new expiration date of October 31, 1999. DOE personnel responsible for RCRA permitting should contact the responsible agency (i.e., EPA or the designated State agency) for an official version of the RCRA §3010 Notification of Regulated Waste Activity Form.

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Please refer to the Instructions for Filing Notification before completing this form. The information requested here is required by law (Section 3010 of the Resource Conservation and Recovery Act).

# EPA

## Notification of Regulated Waste Activity

United States Environmental Protection Agency

Date Received  
(For Official Use Only)

### I. Installation's EPA ID Number (Mark 'X' in the appropriate box)

☐ A. First Notification ☐ B. Subsequent Notification (Complete item C)

C. Installation's EPA ID Number

### II. Name of Installation (Include company and specific site name)

### III. Location of Installation (Physical address not P.O. Box or Route Number)

Street

Street (Continued)

City or Town

State

Zip Code

County Code

County Name

### IV. Installation Mailing Address (See Instructions)

Street or P.O. Box

City or Town

State

Zip Code

### V. Installation Contact (Person to be contacted regarding waste activities at site)

Name (Last)

(First)

Job Title

Phone Number (Area Code and Number)

### VI. Installation Contact Address (See Instructions)

A. Contract Address  
Location Mailing Other

B. Street or P.O. Box

City or Town

State

Zip Code

### VII. Ownership (See Instructions)

A. Name of Installation's Legal Owner

Street, P.O. Box, or Route Number

City or Town

State

Zip Code

Phone Number (Area Code and Number)

B. Land Type

C. Owner Type

D. Change of Owner Indicator

(Date Changed)  
Month Day Year

Yes

No

## ID - For Official Use Only

## VIII. Type of Regulated Waste Activity (Mark 'X' in the appropriate boxes; Refer to instructions)

## A. Hazardous Waste Activity

1. Generator (See instructions)  
☐ a. Greater than 1000kg/mo (2,200 lbs.)  
☐ b. 100 to 1000 kg/mo (200-2,200 lbs.)  
☐ c. Less than 100 kg/mo (220 lbs.)
2. Transporter (Indicate Mode in boxes 1-5 below)  
☐ a. For own waste only  
☐ b. For commercial purposes
- Mode of Transportation  
☐ 1. Air  
☐ 2. Rail  
☐ 3. Highway  
☐ 4. Water  
☐ 5. Other - specify
3. Treater, Storer, Disposer (at installation) Note: A permit is required for this activity; see instructions.
4. Hazardous Waste Fuel  
☐ a. Generator Marketing to Burner  
☐ b. Other Marketers  
☐ c. Boiler and/or Industrial Furnace  
☐ 1. Smelter Deferral  
☐ 2. Small Quantity Exemption  
Indicate Type of Combustion Device(s)  
☐ 1. Utility Boiler  
☐ 2. Industrial Boiler  
☐ 3. Industrial Furnace
5. Underground Injection Control

## B. Used Oil Recycling Activities

1. Used Oil Fuel Marketer  
☐ a. Marketer Directs Shipment of Used Oil to Off-Specification Burner  
☐ b. Marketer Who First Claims the Used Oil Meets the Specifications
2. Used Oil Burner - Indicate Type(s) of Combustion Device(s)  
☐ a. Utility Boiler  
☐ b. Industrial Boiler  
☐ c. Industrial Furnace
3. Used Oil Transporter - Indicate Type(s) of Activity(ies)  
☐ a. Transporter  
☐ b. Transfer Facility
4. Used Oil Processor/Re-refiner - Indicate Type(s) of Activity(ies)  
☐ a. Process  
☐ b. Re-refine

## IX. Description of Hazardous Wastes (Use additional sheets if necessary)

## A. Characteristics of Nonlisted Hazardous Wastes. (Mark 'X' in the boxes corresponding to the characteristics of nonlisted hazardous wastes your installation handles; See 40 CFR Parts 261.20 - 261.24)

1. Ignitable (D001) ☐ 2. Corrosive (D002) ☐ 3. Reactive (D003) ☐ 4. Toxicity Characteristic (List specific EPA hazardous waste number(s) for the Toxicity characteristic contaminant(s))

## B. Listed Hazardous Wastes. (See 40 CFR 261.31 - 33; See instructions if you need to list more than 12 waste codes.)

1	2	3	4	5	6
7	8	9	10	11	12

## C. Other Wastes. (State or other wastes requiring a handler to have an I.D. number; See instructions.)

1	2	3	4	5	6
---	---	---	---	---	---

## X. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature

Name and Official Title (Type or print)

Date Signed

## XI. Comments

Note: Mail completed form to the appropriate EPA Regional or State Office. (See Section III of the booklet for addresses.)

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

ID - For Official Use Only

## IX. Description of Regulated Wastes (Additional Sheet)

B. Listed Hazardous Wastes. (See 40 CFR 261.31 - 33; Use this page only if you need to list more than 12 waste codes.)

13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36
37	38	39	40	41	42
43	44	45	46	47	48
49	50	51	52	53	54
55	56	57	58	59	60
61	62	63	64	65	66
67	68	69	70	71	72
73	74	75	76	77	78
79	80	81	82	83	84
85	86	87	88	89	90
91	92	93	94	95	96
97	98	99	100	101	102
103	104	105	106	107	108
109	110	111	112	113	114
115	116	117	118	119	120

